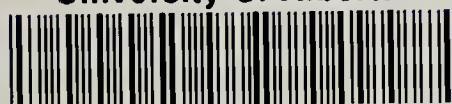


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THE Blue Jay

Vol. XVII, No. 4

SASKATOON, SASK.

DECEMBER, 1959



Snowy Owl

Photo by Cy Hampson

Published quarterly by
THE SASKATCHEWAN NATURAL HISTORY SOCIETY
REGINA, SASK.

BLUE JAY CHATTER

This past year has been, in many ways, a memorable one for the Saskatchewan Natural History Society. The summer meeting in June in the Moose Mountain Provincial Park gave us some unexpected bird records and, more important, many interesting new friendships. In August our botanists helped entertain a group of international botanists on a grassland tour, and many of our birders attended the meeting of the American Ornithologists' Union in Regina. Now we have just had one of our best annual meetings, thanks to the organizing ability and the hospitality of the Moose Jaw Natural History Society.

One of our members, Dr. C. Stuart Houston, was signally honoured this year by being elected an elective member of the A.O.U. Later, at our annual meeting, our society gave Stuart its Conservation Award. Stuart's finest achievement to date is the 205-page book *The Birds of the Saskatchewan River, Carlton to Cumberland* (Special Publication #2, Saskatchewan Natural History Society, August, 1959) written in collaboration with Maurice Street, who contributed records and prepared the items for Nipawin from his exceptionally complete field notes.

This year the cost of printing the **Blue Jay** alone has exceeded our income from memberships. That means we must either reduce the size and quality of the **Blue Jay** or find more money in some way. After careful consideration it was decided at the annual meeting to raise the membership fee. The regular membership is now two dollars a year, but all school and junior memberships will remain at one dollar. This increase may be a hardship to some people but we hope that no one will have to drop his membership because of the increase in fees. We hope that the increase will give us a little more money and allow us to improve the **Blue Jay**, with special consideration being given to making it of more interest and value to children. We should like to see an increasing number of memberships taken out by or for young people (at the special student rate of \$1.00).

There have been bereavements during the past year and some of these have been noted in the pages of the **Blue Jay**. In memory of the **Blue Jay's** special friend Cliff Shaw, the executive decided to establish an annual memorial prize. Cliff Shaw not only served as the second editor of the **Blue Jay** but he was almost the sole worker for the magazine following the death of Mrs. Priestly. It was Cliff Shaw who kept the **Blue Jay** alive until the Saskatchewan Natural History Society was finally organized to help him out. Cliff not only had many interests in natural history himself but he encouraged young people in those interests. The Cliff Shaw Memorial Prize will be awarded each year to someone who has made a contribution to the **Blue Jay** meriting special recognition. The first award was made to Glen Fox of Kindersley for his careful observations of the Horned Lark. The conscientious way in which Glen went about his study and the way in which he recorded his findings deserve commendation. We think that this is just the sort of contribution to the **Blue Jay** that Ernst Mayr, past president of the A.O.U., and E. Eisenmann, past editor of the **Auk** (with whom we had pleasant and worthwhile discussions during A.O.U. week) feel we should make a special effort to encourage. We congratulate Glen and hope that he will do more and better work each year.

Finally, I wish on this page to thank all those who have sent in articles, letters and suggestions. Although we are not always able to answer all the letters, we do appreciate your sending us your ideas. This is what keeps the society alive! Season's Greetings to you all and may the New Year bring a better society and a better **Blue Jay**.

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The Blue Jay

Published quarterly by the Saskatchewan Natural History Society

Founded in 1942 by Isabel M. Priestly

Authorized as second class mail, P.O. Department, Ottawa.

VOL. XVII, No. 4

DECEMBER, 1959

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Regular Membership (including **Blue Jay**) \$2.00; Junior Membership, \$1.00.

A Message from the President

By Robert W. Nero, Regina



Sask. Photo Services.
ROBERT W. NERO

Judging from the comments made by people at the A.O.U. meeting, the **Blue Jay** is one of the most respected natural history journals on the continent. Mrs. Priestly would undoubtedly be proud of us. In going back over Mrs. Priestly's **Blue Jays** I am reminded to what extent she was interested in recording accurate original observations. I think that the present **Blue Jay** conforms nicely to her policies. I think that we are also in complete agreement with her in believing that conservation includes the study and understanding, as well as the appreciation, of our natural environment. Research—and by this I include all factual recording, all original studies—provides the basis for a better understanding of the environment; furthermore, it also provides a sound basis for management, particularly from our point of view which attempts to ensure some preservation of the natural aspect.

I think the Society should encour-

age research in natural history by all possible bodies, by the governments, the universities, museums and other agencies. I also hope that the next year will see an increased amount of study by members themselves. Even the simplest study is in the nature of an exploration and can bring personal satisfaction because of this.

Our local societies can do much to promote studies by members. The Prince Albert society has organized a group research project to attempt a complete biological inventory of a mixed wood forest area north of Christopher Lake. It is unlikely that this has ever been done in Saskatchewan and we wish these ambitious members the best of luck in their undertaking. This kind of inventory is needed for every different habitat in the province.

Aldo Leopold in his **Sand County Almanac** (this is one book every member should read) has seen the possibilities of such amateur research. "The more difficult and laborious research problems must doubtless remain in professional hands," he says, "but there are plenty of problems suitable for all grades of amateurs." He cites the classic examples of Margaret Nice, who studied song sparrows in her back yard and became a world authority on bird behaviour; of Charles L. Broley, a banker who banded eagles for fun and discovered a hitherto unknown fact: that some eagles nest in the south in winter and then go vacationing to the north woods; of Norman and Stuart Criddle, wheat ranchers on the Manitoba prairies, who studied the fauna and flora of their farm, and became recognized authorities on everything from local botany to wildlife cycles; of Elliott S. Barker, a cowman in the New Mexico mountains, who wrote one of the two best books on that elusive cat: the mountain lion. Then he adds, and I should like to leave these words of Leopold with every member of our society: "Do not let anyone tell you that these people made work out of play. They simply realized that the most fun lies in seeing and studying the unknown."

Annual Meeting of A.O.U., 1959

By John A. Livingston, Executive Director, Audubon Society of Canada



Photo by F. W. Lahrman

"This alone was worth coming 4,500 miles to see!" James Fisher sprawled on his ample back in the prairie stubble, gazing skyward, entranced. Above him in the late summer sunshine, hundreds of sandhill cranes were wheeling effortlessly, riding invisible thermals beneath anvil-shaped cumulus clouds. Higher and higher the great birds mounted the spiral stairways of the air, until many literally rose out of sight. . . .

Fisher was by no means the sole observer of this magnificent spectacle. Around and near him were scores of enthusiastic bird students, all spellbound by a phenomenon relatively few had ever witnessed before. It was Saturday, August 29, 1959. The place was the north end of Last Mountain Lake, Saskatchewan. The milling crowd (which despite its size for once did not outnumber the birds) were participants in a field trip portion of the

77th annual meeting of the American Ornithologists' Union, first such meeting ever held in western Canada.

As the late Ludlow Griscom might have said, the world is full of people who have not seen thousands of sandhill cranes in the air at once. As Stuart Houston **did** say, "It's indescribable." One of the most spectacular natural events of the Canadian year unfolded—right on schedule—for the delight and edification of people who had come thousands of miles to the most memorable and rewarding A.O.U. meeting in recent history. I say "right on schedule." I almost said "right on cue."

It was not mere blind luck that the cranes—the feature attraction of an altogether remarkable series of field trips—picked up their cue. It was good management and careful preparation, albeit delicately blended with that mysterious good fortune

that often seems to smile on the deserving! The several local committees responsible for the various arrangements have no doubt been listed elsewhere, but I must make special mention of the keen types with their trucks and their two-way radios, who scoured the feeding areas of the cranes and kept play-by-play tabs on their location. The secret's out. Anyone who has ever had anything to do with birds tries to leave as little as possible to chance!

There's no end to the memories of that delightful afternoon. There were the determined but unavailing efforts of Roger Peterson and myself (with generous aid from Elmer Fox, Frank Brazier, et al) to produce sharp-tailed grouse for James Fisher's life list. That sharptails were spotted later in the day availed us little. By that time we were back looking for Baird's sparrows — for R. T. P. Memorable, too, was that seemingly endless, happy and light-hearted queue waiting for lunch at Last Mountain Lake. A lunch, by the way, well worth queueing for. . . .

There was the breathtaking stoop of a prairie falcon, the ponderous but

ultra-dignified flapping of a pelican . . . the chattering of the longspurs, the guttural resonance of cranes, the dry rustling of the prairie breeze in the aspens and dwarf willows. There were the miniature explosions of Sprague's pipits and horned larks rising from the grass in front of us. But best of all, to me, there was that fabulous western sky. . . .

The Regina meeting of the A.O.U. was not held *entirely* in the open, though picnic supper on the Museum lawn, a falconry demonstration by Dick Fyfe, and sundry other fresh-air endeavors reflected the desire of our hosts to expose us to their exhilarating outdoors at every conceivable excuse. Indoors, the pattern of careful, thoughtful arrangement, painstaking attention to detail, and unusually imaginative presentation gave one a feeling less of attending a formal convention, more of visiting old friends.

It is not my purpose to mention the many papers delivered at the meeting. These will be published, no doubt, in due course. It is my intention, however, to pay tribute to those responsible for the art and photo-

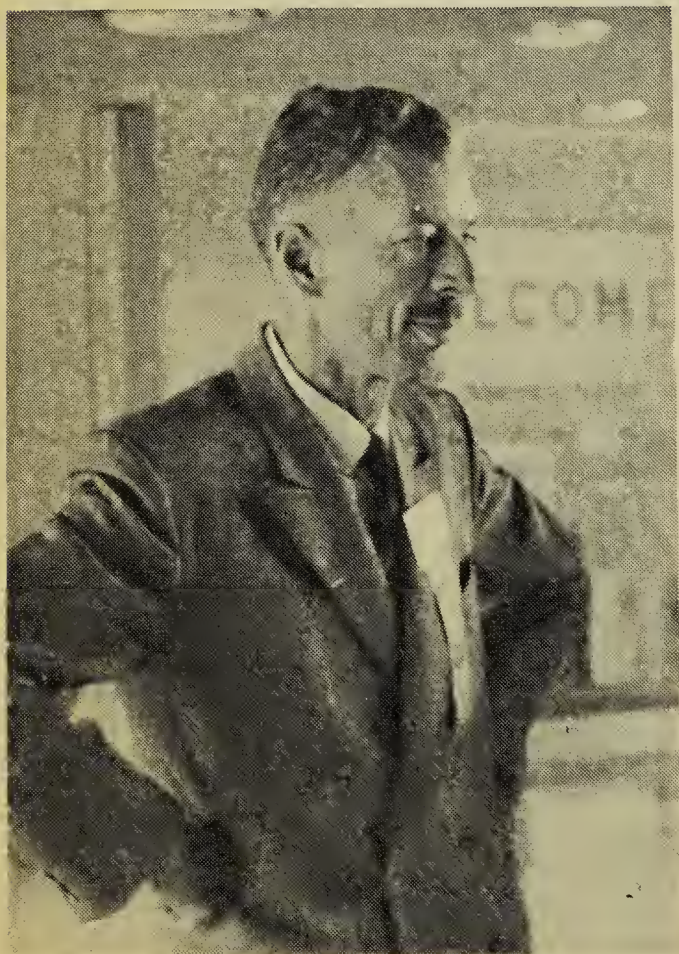


Photo by F. W. Kent

BILL GUNN
author of the "Sounds of Nature" series of bird records.

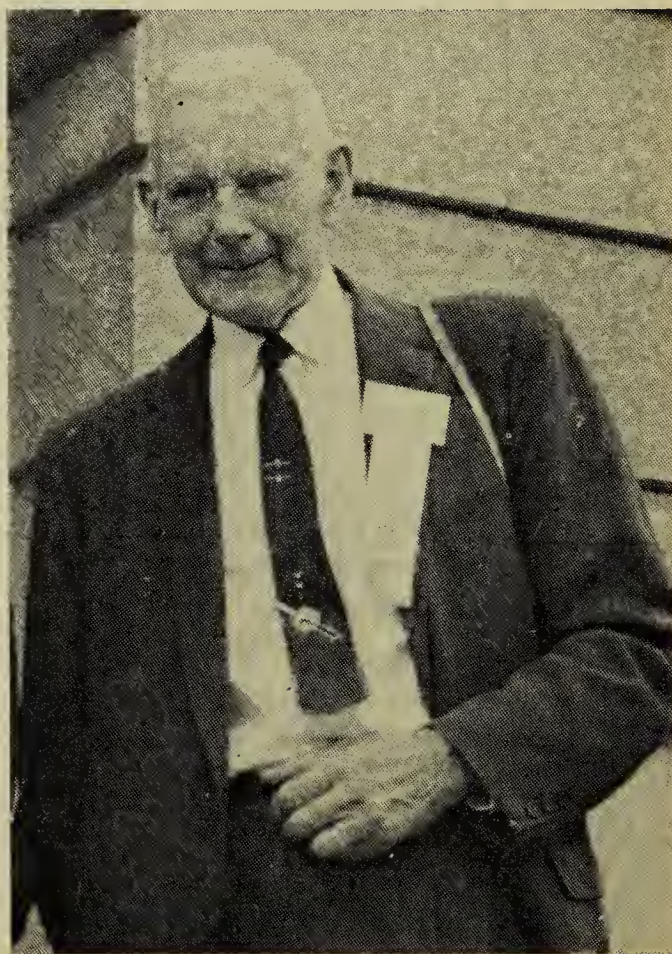
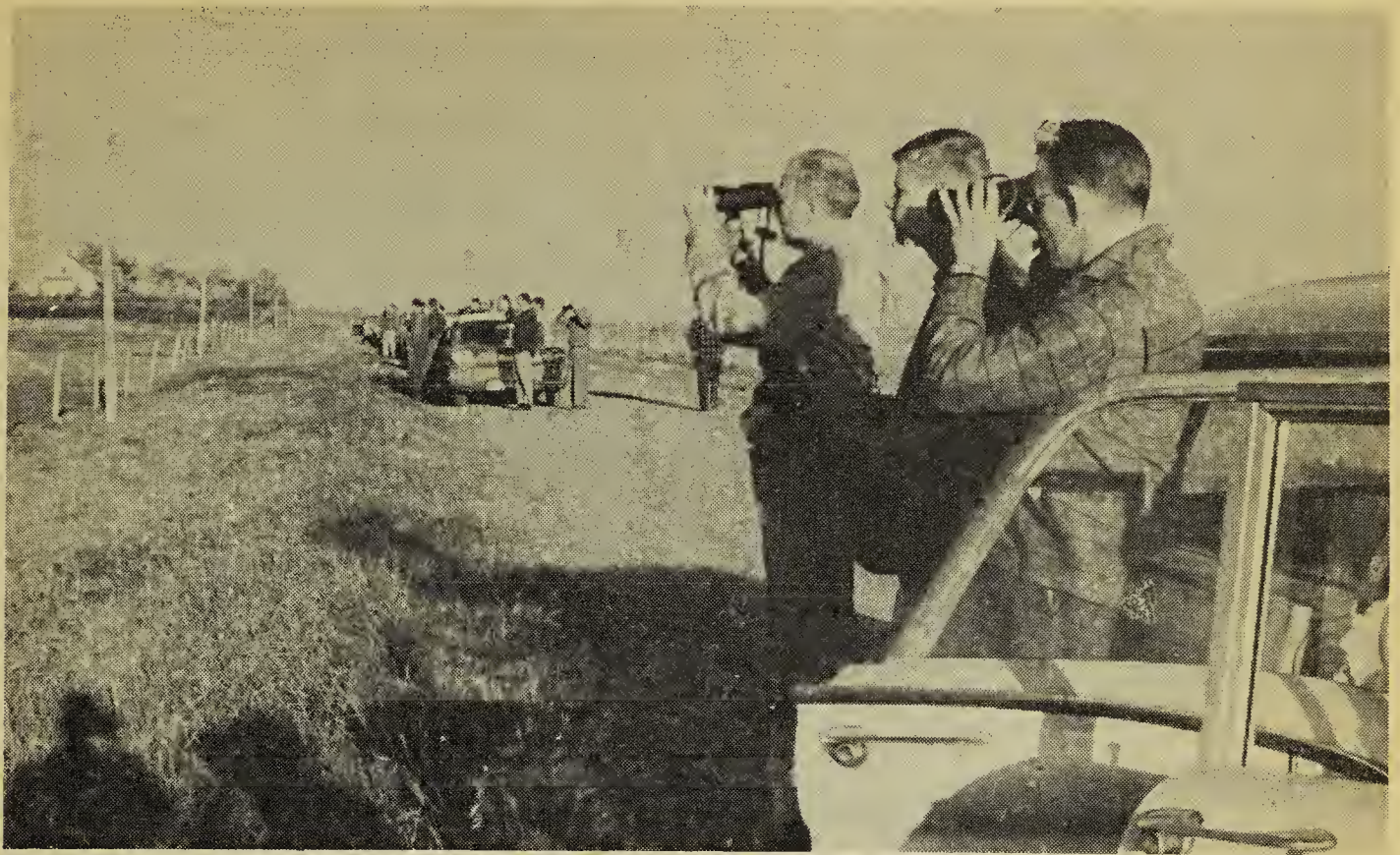


Photo by F. W. Kent

ALEXANDER WETMORE
dean of American ornithology.

*Photo by F. W. Kent*

EARLY MORNING BIRDING

graphy exhibits, the latter in particular being by all odds the finest presentation of this sort of material I have ever seen anywhere. It will unquestionably serve as a model for such displays elsewhere. It was much more than a collection of first-class photographs. It was an intimate, sensitive and wholly delightful introduction to the birds of Saskatchewan—or to birds everywhere. The incredibly versatile Fred Lahrmann and the indefatigable and resourceful Bob Nero were doubtless the authors of this piece, which bore an unmistakable stamp of freshness and originality.

This same aura of youthful vigor and enthusiasm pervaded the entire proceedings. And what better habitat for the A.O.U. than the spanking-new Saskatchewan Museum of Natural History! Eyes were opened, unquestionably, and last impressions made, by this handsome, modern and vital building. Ideas were exchanged, theories expounded, opinions bandied, experiences swapped—all in an atmosphere of brightness, comfort and efficiency.

Mention cannot be made of the Museum without our remembering the one deeply regrettable part of the A.O.U. meeting. That, of course,

was the unavoidable absence (through illness) of our good friend Fred Bard, the Museum's director and thus one of our chief hosts. To a man, those present keenly regretted not being able to shake Fred's hand and congratulate him—not only on his distinguished new building, but on his and the Museum staff's handling of their share of the intricate and multitudinous details of the meeting. If it is any consolation to him, all of us missed Fred Bard very greatly indeed. One certain consolation, however, must have been the unique honor he enjoyed earlier this year, when he conducted Her Majesty the Queen on a tour of the Museum.

It's difficult to give adequate acknowledgment to the magnificent job Regina did on the A.O.U. convention. Of course it went well beyond the Regina Natural History Society, the whole province being involved through the Saskatchewan Natural History Society and the provincial government (the generosity of the latter being unprecedented in ornithological memory). The entire affair was a masterpiece of arrangement and presentation. Such a precedent will be difficult for local committees at subsequent meetings to equal.

Resolution of Appreciation

From **H. G. Deignan**, Secretary, American Ornithologists' Union

RESOLVED, that the American Ornithologists' Union, here assembled in Regina, expresses its grateful appreciation to the sponsoring organizations: Regina College of the University of Saskatchewan, the Saskatchewan Natural History Society, the Regina Natural History Society, and the Saskatchewan Museum of Natural History of the Department of Natural Resources; to the Museum Director, Fred G. Bard; and to Robert W. Nero, Chairman of the Local Committee on Arrangements, and his efficient and hard-working committee members; Mrs. Marjorie Ledingham, Elmer Fox, Margaret Belcher, Frank Brazier, Joyce Dew, Richard Fyfe, Peter Gregg, Mrs. Jean Hodges, Bruce Knox, Fred W. Lahrman, George F. Ledingham, Max McConnell, James Millington, Gertrude Murray, and Bruce Shier.

The American Ornithologists' Union wishes also to thank all the many persons who have made possible the field trips, art and photography exhibits, tours, and other special events which have so hospitably accompanied the 77th Stated Meeting.

Letters

Editor's Note: A great many complimentary letters were received by the Local Committee after the A.O.U. meeting in Regina in August, and we take pleasure in printing a small selection from them to show how generous our guests were in showing their appreciation.

October 2—"I saw Dr. Wetmore yesterday and he smiled nostalgically and said 'Didn't we have a good time in Regina?' People are still talking about it!" Helen Hays, The American Museum of Natural History, NEW YORK.

September 16—"The meeting in Regina will go down in ornithological history as one of the finest gatherings the Society has ever held." George H. Lowery, Jr., President, A.O.U., BATON ROUGE, La.

September 26—"I am compelled to write you to tell you how much my wife and I, and I think James Fisher, enjoyed the meetings in Regina. I have attended A.O.U. meetings since 1925—which is a long time now—but I can't recall ever enjoying a meeting more than this one. Partly I suppose it was because Saskatchewan was a new province to me. Regina is such a handsome city and has one of the loveliest small museums I have ever seen. As James Fisher said, it is impeccable. You are doing a very fine job and I can see how much the museum is doing to stimulate interest in natural history, and I imagine, conservation, in the Province of Saskatchewan. I was pleased to see the great concentration of cranes, and I do hope that the few stooks of grain they damage will be over-

looked. You must have the bulk of the cranes on the continent during migration, and it is important to keep them. Next time I come to Saskatchewan I hope it is in the late spring or early summer. I have never seen the northern prairies at that season. Thanking you again for a very pleasant visit and a successful convention." Roger T. Peterson, OLD LYME, Conn.

September 11—"Although I expressed to you personally my appreciation of the excellent work done by the local committee at the recent



Photo by F. W. Kent
ROGER TORY PETERSON autographing his field guide.

A.O.U. meeting, I want to repeat it more formally, so that you can pass it on to the others who did such a splendid job. I believe when I last talked with you it was a day or two before the excursion to the north end of Last Mountain Lake on Saturday, the 29th. This, too, went off in splendid style and I am sure that all of those who made the trip were equally appreciative of the fine arrangements that had been made. The show of Lesser Sandhill Cranes was the most magnificent bird spectacle that I have ever witnessed and it was one well 'stage managed'." F. C. Lincoln, Assistant of the Director, United States Fish and Wildlife Service, WASHINGTON 25, D.C.

September 9—"We thought you would be interested in knowing that we had several carloads of birders on Sunday after the Regina meeting and a few visitors during the week. Each and every one had glowing comments to make about the organization, museum, hospitality, etc. They were also impressed with the pink and blue deals. We, too, want you to know how much we enjoyed the meeting. It was the best we have ever attended." Ann Gammell, KENMARE, North Dakota.

September 11—"Congratulations to you and that wonderful committee of yours on the way you handled the A.O.U. meeting. It was just one pleasant surprise after another. Everything went like clockwork. Excellent organization, planning, and such hospitality. For my money, it was the most memorable A.O.U. meeting I ever had the pleasure of attending and I know a lot of other people who feel the same way." W. Earl Godfrey, National Museum of Canada, OTTAWA.

September 9—"My sincere congratulations go to you and to your associates for the arrangements that you made so competently in connection with our A.O.U. meeting. You even seemed to have some stand-in with local weather control—the pleasant temperature was most welcome to us from Washington as the month of August has been one of the hottest on record in this city. The Regina meeting will remain an outstanding one in my memory because of the honor that came to me. It was also kind of the Government of the

Province to give me the fine souvenir in the form of the decorative ash tray that was presented to me at the dinner. Mrs. Wetmore asks that you convey to the ladies on the Local Committee her sincere appreciation and thanks for the friendly and patient manner in which they guided the, shall we say, fellow travellers! Especial thanks go to the ladies who were hostesses at the marvellous tea given on the afternoon of the trip to Qu'Appelle." A. Wetmore, WASHINGTON, D.C.

September 30—"I believe that I was the only Canadian at the meeting two years ago, and it gave me great pleasure then to speak up in favour of Regina. My favourable report has been fully justified. The Museum staff and all your co-workers, from the Premier down, deserve sincere thanks for their efforts." Hoyes Lloyd, OTTAWA, Canada.

ACKNOWLEDGMENTS

The Local Committee of the A.O.U. wishes to thank the following organizations for assisting them to entertain the delegates to the annual meeting of the American Ornithologists' Union held in Regina, August 25-29.

R. J. Fyfe Equipment Ltd.
Kramer Tractor Co. Ltd.
Tobin Tractor (1957) Ltd.
W. F. Fuller Machinery Co. Ltd.
Hotels Association of Saskatchewan
Saskatchewan Natural History Society
Regina Natural History Society
Regina College
Government of Saskatchewan.

In addition, thanks are due several individuals who helped make it possible for junior naturalists to come to the A.O.U. meeting, notably Mr. Justice P. H. Gordon, and Mrs. L. McK. Robinson of Regina and Dr. Stuart Houston of Yorkton who arranged board and room during the meeting for junior members of the S.N.H.S. from Saskatchewan and Manitoba. In addition, a travel grant was made by the Local Committee of the A.O.U. to bring a student from Montreal, and a contribution toward board and room at Regina College was made on behalf of three other students from the United States.

Sandhill Cranes – A Conservation Problem



Photo by F. W. Lahrman

RESOLUTION FOR PROTECTION PASSED BY S.N.H.S.

The regular concentration of large numbers of Sandhill Cranes at the north end of Last Mountain Lake was the *raison d'être* for the main field trip planned for the A.O.U. in late August. More than a year before, this unique trip had been plotted and birders were promised the spectacular sight of 10,000 Sandhills in the fields. Although the count of cranes seen by the visitors on August 29 was probably 5000-6000 rather than 10,000, experienced ornithologists from across the continent who had come to the meeting were amazed by the great flocks which they watched feeding in the fields and circling in the air above.

Only a few weeks after the A.O.U. visitors had been thrilled by this unforgettable experience, we learned that crop depredation by cranes in the poor-crop area north of the lake had made it necessary to open the season on Sandhill Cranes, permitting shooting (with no bag limit) in a restricted area. Although aware of the serious financial losses suffered by farmers in the area, the Saskatchewan Natural History Society deplored that such a measure was deemed necessary. This feeling was especially strong among members of the society because so many of them had just been introduced to the great

flocks of cranes in the recent memorable A.O.U. field trip, and because they had come to learn that the population that rests at the north end of Last Mountain Lake represents a significant portion of the whole North American population. Accordingly, a resolution was passed at the annual meeting, October 17, to this effect:

RESOLVED THAT the Wildlife Branch of the Saskatchewan Department of Natural Resources be urged to ensure the protection of all Sandhill Cranes by the following measures —(1) by increasing the areas of full protection in the province, especially at the head of Last Mountain Lake; (2) by planting grain crops to encourage cranes to keep within these limits; (3) and in addition to, or in advance of, these developments to provide further funds to recompense local grain-growers and to forestall all shooting.

The Wildlife Branch to which this resolution is being submitted is even more conscious than the members of our society of the complexity of the problem involved. We are pleased to have from Mr. T. A. Harper, biologist and Assistant Director of the Wildlife Branch, a full and convincing statement of the problem. With us, the Wildlife Branch is asking: "How can this conservation problem be solved?"

Sandhill Cranes and the Future

By **T. A. Harper**, Wildlife Branch, Regina

There are two sides to every argument and the Sandhill Crane problem is no exception. Most of us will admit that the Sandhill Cranes are not found in large numbers throughout the prairie provinces during migration. Anyone who has travelled in the provinces during the fall realizes that the cranes prefer certain resting areas such as the north end of Last Mountain Lake and concentrate in a few of these areas in large numbers.

To those of us who receive enjoyment from the sights and sounds of wildlife, the sight of six to ten thousand cranes is an experience never to be forgotten. Similarly the farmer who sees several thousand cranes scattering and trampling his carefully swathed grain is not likely to soon forget the incident. To the farmer such a sight means a direct loss of income while the rest of us sit back with our wallets secure and say "such magnificence should be preserved."

How serious is the other side of the argument? A recent example—approximately 100 farmers from the Govan-Nokomis and Imperial district held a meeting at Imperial, Saskatchewan, on October 13, 1959, to discuss crop depredations by waterfowl with Federal and Provincial Officials. The main purpose of this meeting was to point out to government officials that the Sandhill Crane population had built up to the point where it was causing unnecessary damage to both swathed and standing crops in the areas. Those farmers wanted to know what could be done about it.

The use of scarecrows and other scaring devices such as exploders, etc., were outlined to the farmers who in most cases were already using one or more of these devices. The exploders, a rather new device, seem to hold considerable promise as an efficient scaring device without causing harm to the birds. More of these will no doubt be brought into use in the future.

The use of lure crops is another program which can be effective in keeping the birds off privately-

owned farmland. Unfortunately the one lure crop operated by the Wildlife Branch of the Department of Natural Resources is not enough during extreme years.

The Wildlife Insurance program that is available in Saskatchewan (the only known insurance plan for loss by wildlife) does help, but it is not the complete answer. Hunters contribute substantially to the insurance scheme but indemnities are frequently insufficient to cover total loss even if the farmer was able to outguess the vagaries of the cranes' decision to flock into his fields and took out crop insurance ahead of time. It is worthy of mention that hunters are contributing to a crop insurance program that protects crops against damage by a protected species.

During poor harvest years, such as we have experienced this fall, it is apparent that none of these devices are sufficiently adequate to prevent severe loss to crops. Other methods to assist the farmer must be sought.

We realize the extent to which Sandhill Cranes may destroy crops when we learn that some farmers have claimed up to 160 acres of grain lost to cranes. Farmers at the Imperial meeting reported a total of 790 acres destroyed this fall. Fortunately for the cranes and those officials who met with the farmers, many farmers in the Imperial area had their crops completely hailed out this year. Much of this grain, although not worth salvaging, made excellent feed for cranes and other waterfowl and to some extent tended to relieve the seriousness of the situation, though farmers claimed that their cattle would not pasture on the fields after cranes had frequented them.

I don't think any of us would like to see the Sandhill Crane population reduced in number as is the case with the Whooping Crane. But we must be practical-minded enough to realize that individual farmers cannot be expected to sit back and watch the culmination of their year's labour destroyed by any wildlife species. In poor harvest years such as 1959 with thousands of cranes resting in the



Photo by F. W. Lahrman

SANDHILLS feeding in the grain fields.

Last Mountain Lake area, it was considered necessary by wildlife authorities to permit hunters to assist the farmers in protecting crops where cranes were causing damage. An area in the province was designated wherein individual farmers were not required to obtain a special permit to protect their crops against damage. This was not a new practice; it has been conducted in the past but only when the situation was extremely serious.

Such a policy permitting the shooting of Sandhill Cranes is distasteful to many and this feeling was so expressed in a resolution recently passed at the Moose Jaw meeting of the Saskatchewan Natural History Society. It is commendable that there is an organization of this kind to keep the public aware of what is

happening to the wildlife of the province. But at the same time we must be careful to maintain a wide, yet practical viewpoint—one that allows all aspects to be clearly envisaged.

Perhaps there are some ways in which the Sandhill Cranes can be protected from destruction without depriving individuals of their livelihood. If so this is where our energies and resources should be directed. Would refuges or lure crops established in key positions be the answer? Would a program of purchasing entire fields of unharvested grain in serious depredation areas do the trick? New scaring devices or techniques may help. Whatever the answer, if it is to be effective, it will require **effort** and money!

How much are the Sandhill Cranes worth to you?

TV Tower Casualty List

By **F. W. Lahrman**, Saskatchewan Museum of Natural History

On September 22, 1959, I visited the Moose Jaw TV tower which is located approximately four miles south and four miles west of Caron, Sask., to see if any birds had been killed by flying into the tower or guy wires. This 480-foot tower is situated on a height of land at 2400 feet which slopes down approximately 500 feet to the surrounding plain to the north and east. I had noticed a "wave" of warblers and

sparrows that morning and since towers are known hazards for migrating birds, decided that the tower might be worth checking.

I found in all 33 birds of 13 species strewn about the ground and south-east of the tower; while most were found within 50 yards of the base of the tower, some were over 100 yards away. A list of the birds which were found follows:

American Coot (1), Red-eyed



Photo by F. W. Lahrman

Birds collected at Moose Jaw T.V. tower, Sept. 22, 1959.

Vireo (1), Black-and-White Warbler (1), Orange-crowned Warbler (6), Yellow Warbler (3), Palm Warbler (3), Myrtle Warbler (7), Yellow-throat (2), Savannah Sparrow (1), Sharp-tailed Sparrow (1), Vesper Sparrow (1), Fox Sparrow (1), Lincoln (5).

All of the above birds appeared to be quite freshly killed—doubtless mostly within the past 48 hours. A number of other birds found which had evidently been killed at an earlier date were: Gadwall (1), Blue-winged Teal (1), Red-eyed Vireo (1), Myrtle Warbler (several), White-throated Sparrow (1). In addition three Myrtles, one Yellow-throat, and one Orange-crowned Warbler were found injured but able to flutter away. The past two previous nights when this occurred were overcast and misty. On September 23, I visited the tower again and found one Red Bat (*Lasiurus borealis*) and one injured Least Flycatcher.

In this connection, it is interesting to note the conclusions drawn by William W. Cochran and Richard R. Graber, in an article "Attraction of nocturnal migrants by light on a television tower" (Wilson Bulletin, 70:378-380, 1958). They find that (1) "Migrants are attracted to the towers by the tower lights, and (2) only a

very small per cent of the birds which reach the tower are killed" and that their observations indicate "that confusion of nocturnal migrants by tower lights occurs only on nights when the ceiling is low, and migrants are apparently forced to fly near or below the 1000 to 3000 feet level."

If we accept this conclusion, a higher tower would present greater danger to migrants. C. A. Kemper (1958. Destruction at the TV Tower, *Passenger Pigeon*, 20:3-9) noted this, reporting that a 500-foot tower in Wisconsin checked regularly showed little kill but when a second tower of 1000 feet was placed nearby there was an immediate drastic increase in mortality. Kemper gave these figures for three major collisions at the two towers: on Aug. 29, 1957, up to 500 birds were killed; on Sept. 3, up to 400; and on Sept. 20—and this is no typographical error!—a conservative estimate of 20,000 birds covered the ground for up to three-quarters of a mile away.

There have been few reports of TV tower bird casualties in the Great Plains, and the Moose Jaw report is probably the largest for the Northern Plains. It is therefore important to get all the information we can about these tragedies—the circumstances under which they occur, meteorological data, species involved, and any unusual behaviour observed at the site.

CO-OPERATIVE SPRING

Compiled by Stuart and Mary Houston, Yorkton.

	BATTLEFORD Spencer G. Sealy	BLADWORTH P. L. Beckie	DILKE J. B. Belcher	DUVAL Geo. H. Herber	ESTEVAN Ross Lein	FORT SAN E. M. Callin	GRENFELL Mrs. J. Hubbard	HEPBURN Victor G. Peters
Whistling Swan	Ap18	Ap18	Ap16	Ap27		Ap16	Ap30	
Canada Goose		Ap11	Mr22	Mr31	Ap10	Mr29	Ap 6	
Mallard	Mr31	Mr27	Mr27	Mr28	Mr25	Mr28	Mr29	Mr29
Pintail	Ap11	Mr27	Mr23	Mr29	Mr29	Ap 9	Ap 4	Mr28
Marsh Hawk	Mr21	Mr26	Mr22	Mr19	Ap11	Mr28	Mr19	Mr28
Killdeer	Apr 7	Ap 1	Ap 1	Ap 8	Mr31	Mr31	Ap 3	Ap 9
Common Snipe				Ap26		Ap23		
Mourning Dove	Ap25	Ap27	Ap19	Ap24	Ap11	Ap19	My 2	My18
Common Nighthawk	My21	My24			My31	My21		My25
Ruby-throated Hummingbird ..		My27				My24	My25	
Yellow-shafted Flicker	Ap25	Ap23	Ap19	Ap19	Ap16	Ap19	Ap24	
Eastern Kingbird	My16	My17	My20	My 8	My16	My 9	My14	My20
Eastern Phoebe					My15	Ap26		
Barn Swallow	My 3	My 9	My 5	My 1	My 4	My 3	My 6	My13
Purple Martin	My 7			My20		My 3	My12	
Common Crow	Mr21	Mr21	Mr21	Mr20	Mr21	Mr21	Mr22	Mr22
House Wren	Jn 2	My29	Jn 2	My29	My 2	My 6	My13	My24
Catbird	Jn 4	My29		My19	My25	My21	My22	Jn 3
Brown Thrasher	My21	My19	My 1	My19	My16	My14	My18	My24
Red-eyed Vireo	My19					My24		
Yellow Warbler	My18	My17	My15	My24	My 3	My13	My10	My31
Myrtle Warbler	My 5	Ap25	My 9		My 2	Ap26	My 2	
Redwinged Blackbird		Ap 1	Mr31	Ap 9	Mr29	Ap 3	Ap13	Ap 8
Baltimore Oriole	My23	My20	My17	My19	My18	My17	My10	My27
Rose-breasted Grosbeak					My22	My18		
American Goldfinch	My15	My24	My27	My25	My23	My16	My21	My30
Slate-colored Junco	Ap10	Ap 8	Mr27		Ap 9	Mr29	Ap10	
Chipping Sparrow	Ap10		My 8	Mr28	My11	My 3		
White-crowned Sparrow	My14	Ap28	My 3	Ap22	Ap29	Ap27	My 7	
White-throated Sparrow	My16	My 4	My 3	Ap29	My 3	My 2	My 3	

MIGRATION STUDY, 1959

	HIGH HILL Steve Waychesen	ITUNA Mrs. Mary F. Brennan	KAMSACK Jacob Jmaeff	KINDERSLEY Glen Fox	KINLOCK Mrs H. Rodenberg	LEROSS Dale Brennan	MASEFIELD J. David Chandler	MELVILLE Gary Anweiler
Whistling Swan	My 5							
Canada Goose	Mr28		Ap 6	Mr26	Ap 2	Mr31	Mr28	
Mallard	Mr27		Mr29	Mr27	Ap 3	Mr25	Mr26	Ap 9
Pintail	Ap13		Mr29	Mr27	Ap 4		Mr25	Ap 9
Marsh Hawk	Mr24		Ap12	Mr31		Mr28	Ap 7	Mr26
Killdeer	Ap11	Ap 6	Ap 6	Mr25		Ap 6	Mr23	Ap 9
Common Snipe	Ap27			My 3				Ap26
Mourning Dove	My 1		Ap30	My 9			Ap26	My 2
Common Nighthawk	My28			Jn 5			Jn 1	My22
Ruby-throated Hummingbird ..	My27	Jn12	My27					My28
Yellow-shafted Flicker	Ap26		Ap23	Ap21		Ap19	Ap19	Ap21
Eastern Kingbird	My28	My25	My21	My16	My 1	My19	My23	My10
Eastern Phoebe	Ap22	My13	My 1			Ap 9	Ap22	My19
Barn Swallow	My 2	My13		My10		My 2	My15	My 9
Purple Martin	Ap28	Jn 8			Ap28			My 7
Ccmmon Crow	Mr24		Mr23	Mr23	Mr24	Mr19	Mr16	Mr26
House Wren	My10		My17	My20		My17	My11	My18
Catbird	Jn29	My27	My20				Jn 7	My22
Brown Thrasher		My22		My20			My23	My22
Red-eyed Vireo	My24			My26			My 4	
Yellow Warbler	My 7	My11	My17	My19	My 8		My17	My 3
Myrtle Warbler	Ap27		My 5	Ap30	My 8	Ap 8		Ap30
Redwinged Blackbird	Ap10		Ap11	Ap 9	Ap 1	Ap 4	Mr31	Ap 9
Baltimore Oriole	Jn 4	My25		My20	My 7			My18
Rose-breasted Grosbeak	My19	My26		Ap23				My10
American Goldfinch	My27	My21	My24	My27	My10		My31	My20
Slate-colored Junco	Mr30		Ap 7	Ap16	Ap 7	Ap 7	Ap 8	Mr23
Chipping Sparrow		My11	Ap12	Ap25	Ap21		My 2	My 3
White-crowned Sparrow		My 4	My 2	My 3	Ap24	My 9	My 2	
White-throated Sparrow	My 7		My 5	My13	Ap24			My 2

CO-OPERATIVE SPRING

Compiled by Stuart and Mary Houston, Yorkton.

	NAICAM Wm. Yanchinski	NIPAWIN Maurice Street	PATHLOW T. M. Beveridge	PRINCE ALBERT Tony Capusten	PRINCE ALBERT Don Karasuik	REGINA Fred Lahman	SHEHO Wm. Niven	SKULL GREEK Steve A. Mann
Whistling Swan		Ap20	My 3			Mr31	Ap21	Mr31
Canada Goose	Ap 5	Ap20	Ap 3	Ap 2		Mr22	Mr24	Mr18
Mallard	Mr29	Ap 5	Ap 2	Ap18		Mr21	Mr27	Mr24
Pintail	Ap 5	Ap 5	Ap 2	Ap18	Mr28	Mr22	Mr31	Mr24
Marsh Hawk	Mr26	Mr26	Mr26				Mr25	Mr27
Killdeer	Mr27	Ap27	Ap16	Ap16		Mr26	Ap 3	Mr18
Common Snipe	Ap26	My 8	Ap21		My14	Ap18		Ap19
Mourning Dove	My 9	My 8	My 5	My31		Ap18	My 1	Ap26
Common Nighthawk	My31	My31	Jn 2	Jn 3	My26	My27	My22	Jn 9
Ruby-throated Hummingbird ..	Jn 7	My31	My26	Jn 2	My31	My20	My30	
Yellow-shafted Flicker	Ap13	Ap27	Ap24		My 1	Ap11	Ap24	Ap10
Eastern Kingbird	My24	My16		My31		My10	My 9	My16
Eastern Phoebe	My 1	My11	My 2	My10	Ap25	Ap19	Ap30	
Barn Swallow	My10	My 9			My 3	Ap18	My 6	My15
Purple Martin	My11		My 1	My 5	My13	Ap29	My15	
Common Crow	Mr22	Mr23	Mr26	Mr27	Mr23	Mr 7	Mr17	Mr22
House Wren	Jn 7	My12	My11	My10	My22	My16	My18	My16
Catbird	My31	My29	Jn 3	Jn 7	My29	My18	My16	My 5
Brown Thrasher						My15	My14	Jn 4
Red-eyed Vireo		My30	Jn 3	Jn 7	Jn 5	My16	My22	Jn 6
Yellow Warbler	My20	My25	My13	Ap24	My13	My10	My17	My19
Myrtle Warbler	My 6	Ap29	Ap24	My10	Ap25	Ap19	Ap20	My 2
Redwinged Blackbird	Ap15	Ap23	Ap 6	Ap18		Mr28	Ap 5	Ap 9
Baltimore Oriole	My25	My24	Jn 3			My11	My16	My17
Rose-breasted Grosbeak			My22	Jn 7		My16	My25	
American Goldfinch	My24	My31	Jn 3		My24	My18	My22	My19
Slate-colored Junco	Ap 7	Mr31	Ap 1	Ap16	Mr27	Mr21	Mr26	Mr18
Chipping Sparrow		My17	My11		My 1	My 2	My12	Ap 3
White-crowned Sparrow		My 8	My 3			Ap28	My 3	My 1
White-throated Sparrow	My 5	My 6	My 2	My 9	My 8	My 2	My 3	

MIGRATION STUDY, 1959

	SPIRIT LAKE Joyce Gunn	TORCH RIVER C. Stuart Francis	TULLIS Mrs. E. C. Boon	WYNYARD Dora Bardal	YORKTON Stuart Houston	DUNREA, MAN. Ernest J. White	SPIRIT LAKE Wm. Anaka	STORNOWAY Stan Zazelenchuk
Whistling Swan	Ap26		Ap29	Ap29	Ap 7	Ap16	Ap19	
Canada Goose	Mr26	My 3	Mr25	Mr23		Mr27	Mr26	Ap 3
Mallard	Ap 2	Ap 6	Ap 4	Ap 3	Ap 3	Ap16	Mr28	Mr27
Pintail	Mr31	Ap13	Ap 6	Ap 6			Ap 4	Ap 3
Marsh Hawk	Mr23	Mr31	Mr27	Mr21	Mr27	Mr27	Mr25	Mr27
Killdeer	Mr28	Ap10	Ap 6	Ap 2		Mr30	Ap 1	Mr30
Common Snipe	Ap28	Ap27					Ap14	
Mourning Dove	My 6	Ap27	My15		My17	Ap30	Ap19	
Common Nighthawk	My27	My28	My24		My31	My20	My24	
Ruby-throated Hummingbird ..	My17	Jn 3		My26		My30	Jn 6	
Yellow-shafted Flicker	Ap23	Ap17		Ap20	Ap14	Ap23	Ap16	Mr29
Eastern Kingbird	My 9	My20	My20	My20	My17	My18	My 9	My20
Eastern Phoebe	Ap19	Ap29					Ap20	Ap30
Barn Swallow	My10	My 9	My16	My20	My17	My 9	My 3	My 2
Purple Martin	Ap28	My20			Ap29			
Common Crow	Mr21	Mr 9	Mr22	Mr21	Mr21	Mr21	Mr22	Mr17
House Wren	My 7	My27	Jn 4	My14	My17	My16	My15	
Catbird	My20			My30	My17	My24	My25	
Brown Thrasher		Jn 1		My17	My17		My16	
Red-eyed Vireo		My20					My29	
Yellow Warbler	My 7			My23	My17		My10	My12
Myrtle Warbler	Ap24				My17	Ap25	Ap24	My 3
Redwinged Blackbird	Ap 8	My 4	Ap17	Ap15	Mr27	Ap 1	Ap 2	Ap 5
Baltimore Oriole	My20	My28		My23	My10	My11	My10	My15
Rose-breasted Grosbeak						My23	My24	My12
American Goldfinch	My25	Jn 6		My23	My27		My24	My21
Slate-colored Junco	Mr26	Apj 6	Ap 4	Ap 5	Ap 7	Mr25	Mr27	
Chipping Sparrow	My 8	Ap20		My16	My 7	Ap 5	My10	
White-crowned Sparrow		My 9		My 3	My 2	My 1	My 3	Ap30
White-throated Sparrow	My 3	My 7		My 3	My 2		Ap30	

Conservation Committee Report to the Annual Meeting of the S.N.H.S.

By **Fred G. Bard**, Sask. Museum of Natural History.

REGINA WATERFOWL PARK

The Regina Waterfowl Park is feeling the pressure of rapid city development. Contacts have been made with the City Commissioner, John Steel, and the Parks Superintendent, William Murray; both are in sympathy with park policy, but are often not even informed of the dumping of soil, cement blocks and other debris from construction which destroys the grass cover and leaves an eroding slope. Much money and man-power will be required to rehabilitate this area as a formal park instead of the intended natural marsh waterfowl park. The present boundaries are less than half of the original Wascana Game Preserve, and the remaining half seems now to be disappearing.

In spite of these changes, the Canada Geese without any management had 31 nests this year, mainly in the vicinity of the Goose Island, with 103 birds being raised (52 banded by Ducks Unlimited, Natural Resources and Museum personnel). Most people are genuinely interested in the geese, but a few are only interested in shooting them, so we have appealed to E. L. Paynter, Director of Wildlife, to approach Ottawa to see if shooting can be prohibited in the two (city) townships 19 and 20, range 17.

Four geese were given to the waterfowl park this year by Mrs. W. Keebeck of Foam Lake. The Keebecks raised these birds in 1954, and Mrs. Keebeck has written us about their experiences with them, as follows: "In 1954, the year of the high water level, my husband knew of three pairs of Canada Geese nesting near a large slough . . . After a heavy May snowfall the nests were washed out except for six eggs that he managed to save and brought home to put under a hen . . . Four of the goslings lived . . . and I clipped their wings before hunting season. . . . However, I didn't like to think of some hunter having easy hunting at our slough, so after the first year I



only clipped one wing and left them free to fly. None of the eggs laid in the past three years has been fertile except for the eggs laid by a goose which this last year mated with a wild gander that stayed in the yard with her . . ." The accompanying photo shows the geese at Mrs. Keebeck's home.

The lowering water table destroys beds of cattails and bulrushes and reduces the cover suitable for black-birds, etc. The water situation became very serious this year, but heavy fall rains have restored the water level adequately.

MARTIN HOUSES IN REGINA—

Three apartment-type martin houses were donated to the Museum by the Regina Fish and Game League and the Regina Natural History Society. Two were installed in Wascana Park adjacent to the Museum and one in front of the Geriatric Centre in the Legislative Grounds. One installed in time for the nesting season, was occupied in a few days; the others were put up chiefly for public interest and the A.O.U. conference.

WHOOPING CRANES — Records for 1959 are rather unsatisfactory. The rapid change in weather and early snow seems to have caused the birds to move earlier than usual. The first two arrived in Aransas 10

days to two weeks earlier than normal. In the fall migrations single birds were seen in three different areas, two of which could have been the same bird. The best record was from Richard where a pair with one young was seen on October 7. During the summer aerial surveys on the nesting ground, only two young were seen. It's too early to say what the winter count will be, but it doesn't look encouraging as the average annual loss seems to be close to four birds.

The New Orleans captive bird laid seven eggs, but reared no young. Here again we are wasting valuable time by not managing the present flock. There have been so many successful avicultural programmes that we believe someone with the necessary "know-how" should be asked to advise on a whooping crane programme. At present the whole whooping crane programme consists

in tracking their movements and encouraging safe passage along the flyway. Without authority and support, we can only wait and see whether the cranes escape the heavy toll twice before taken of their numbers.

PARKS AND WILDERNESS AREAS—It is encouraging to see the province setting up new areas for recreational use. Every individual landowner, too, should be urged to help preserve wilderness areas for recreational use and for study (at both popular and scientific levels). The conservation committee does not function for itself but rather to encourage everyone to participate in conservation. We should like all interested people to keep us informed of projects or continuing programmes as well as individual efforts. When this information is made public others are encouraged to give similar support.

Red Crossbills Feeding on Aphids

By G. F. Ledingham, Regina



Sketch by L. Ostoloroff

On July 29, 1959, I stopped at noon under three old eastern cottonwoods (*Populus deltoides* Bartr. ex Marsh.) which grow in front of our house in Regina. There was a familiar but unexpected chattering of birds above me. Soon I saw a male Red Crossbill (*Loxia curvirostra*) in full plumage. My wife, Betty Cruickshank and Arthur Taylor soon joined me and

we saw about ten crossbills in various plumages.

The interesting thing to me was first that they were here in Regina in July, second that they were in poplar trees. I had never thought of the crossbill as feeding on anything but the seeds of conifers. These crossbills were contentedly feeding in poplars in July. I watched the male snip into a leaf gall, obviously feeding on the insects within the gall, and then go on to the next gall. All the birds were feeding in the same way. Sometimes the leaf would break off at the gall and come floating down. A couple of hours later there were over 200 of these leaves on the ground and the crossbills had moved on and were not seen feeding here again.

Mr. Lloyd O. T. Peterson, entomologist at the Research Branch, Canada Department of Agriculture, Forest Nursery Station, Indian Head, kindly identified the insect for me as the poplar aphid, *Pemphigus populicaulis* Fitch. "Its galls are subglobular. They always occur at the base of the cottonwood leaf and the opening in the gall is oblique. No

doubt this aphid has a complicated life cycle involving a secondary host. Its presence on cottonwood is well known but the damage to the host trees is not considered extensive or serious; consequently, detailed efforts to study its life history in our region for the purpose of formulating control measures have not been undertaken."

P. A. Taverner in his *Birds of*

Western Canada, 1926, says that Red Crossbills "seem specially fond of the little woolly aphids. It was very interesting to watch a captive specimen open galls on poplar leaves. Seizing the fleshy tissue with the bill tips so that the points crossed within the mass, it gave a little twist of the head that split the gall wide open and the aphids within were removed with the tongue."

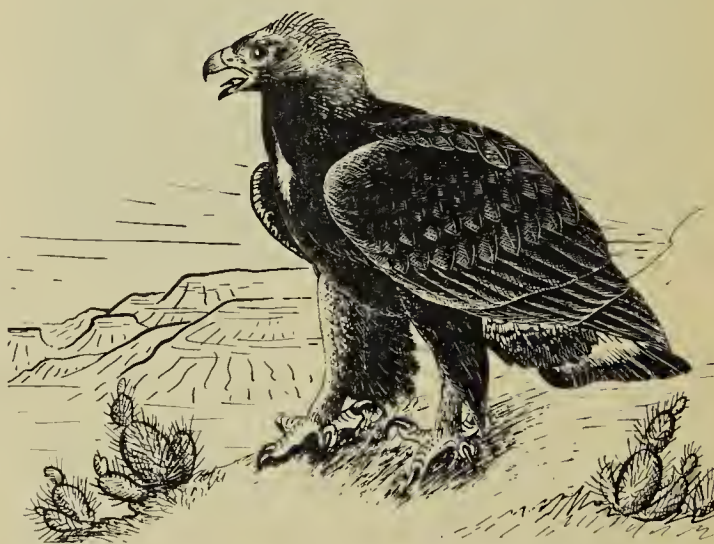
Golden Eagles Preying on Porcupines

By Lawrence Ostoforoff, Sask. Museum of Nat. History

Arthur C. Bent, in *Life Histories of North American Birds of Prey*, Part I, 1937, page 304, lists the porcupine as a food item of the Golden Eagle (*Aquila chrysaetos*). On page 306 Bent gives the following example: "This bold bird sometimes 'catches a Tartar.' Albert Lano (1922) had one brought to him that had attacked a porcupine; 'it was literally covered underneath with quills. In fact there were a number of quills in the roof of its mouth. The body was much emaciated and many of the quills had penetrated deep into the flesh causing pus to form'."

Among Golden Eagle specimens examined by museum staff in recent years, three specimens showed contact with porcupines. One immature female Golden Eagle shot at Mildred, Saskatchewan, December, 1958, had approximately a hundred porcupine quills imbedded in its feet. Its right foot had 62 quills, the left foot 33 quills, most of which were bitten off or torn off close to the flesh. Five quills were deeply imbedded in the roof of the mouth, and the gizzard contained a loose mass of quills, lying parallel and enclosed with soft hair, in somewhat the same manner as a pellet. Six quills were very slightly attached to the gizzard lining; none was imbedded deeply and none was found in other parts of the intestinal tract. The bird was very thin; weight: 6 pounds, 8 ounces.

F. W. Lahrman, while mounting an immature Golden Eagle shot at Bethune, Saskatchewan, November, 1950, noted some quills lying underneath the leg muscle close to the bone. In addition several quills were



Sketch by L. Ostoforoff

found which penetrated the gizzard from the outside. This bird was also very thin.

The third eagle, examined at Mervin, Saskatchewan, by B. C. Shier of the Museum, was so crippled by quills in its feet and mouth that it could no longer hunt its natural prey. It made its way into a chicken coop where it was shot while feeding on a fowl.

Although porcupines are rather common on the Northern Plains, predation by Golden Eagles is probably still a rare occurrence. It is interesting to note that the three Saskatchewan specimens described above were all immature birds, perhaps inexperienced in hunting their usual prey. The dark, slow-moving porcupine on the open prairie would likely be tempting prey for the young, unwary eagle.

Further Notes on the Golden Eagle in the Beechy Area

By **Dave Santy**, Beechy

Recent articles have focussed public attention on the prairie nesting of the Golden Eagle. I have, with others, observed Golden Eagle nests practically every season for the past forty years, in the roughlands area west of the elbow of the South Saskatchewan River.

The nest is usually a large close-knit framework structure of sticks and mud built bracket-like into the south face of a steep cut bank and so strongly attached thereto that I have sat on one (after the nesting season was over), without fear of breaking it down. On two occasions, however, I found active nests that were built on the protruding peak of a high promontory.

In 1953 I observed three active nests in a 50-mile stretch along the river banks in this area: one in the Perrin Ranch southwest of Beechy;

one in the Mason Ranch south of Demaine; the other in the Jones Ranch south of Lucky Lake. They were spaced about 15 miles apart. It would seem, therefore, that each nesting pair requires a large hunting range, and that this is recognized by others of its kind.

In an intensive search this year (1959) only one active nest was located in the area mentioned above.

Farmers and ranchers generally in this district need have no quarrel with the Golden Eagles. Some, however, don't even know what they are and think them to be large harmful hawks. In the nests I have observed, the chief prey item has been the jack rabbit, with gophers and weasels also common. Sometimes a duck or other water bird is present, but I cannot remember seeing remains of barnyard fowl, insectivorous birds or grouse.



Photo by R. Fyle

Golden Eagles in a cliff-side nest in the Big Muddy Valley in a habitat very similar to that described by Mr. Santy at Beechy.

The Hawk Men

By **Richard Fyfe**, Saskatchewan Falconry Association



Photo by R. Fyfe.

Prairie Falcon flying over nest along the South Sask. River.

Many changes have taken place since a year ago when our small group of ardent falconers met with natural history people at the annual meeting in Saskatoon. At that time we were all concerned about protection for our predatory birds. Today it seems that a major step has been taken—we hope that new legislation will be forthcoming for our hawks and owls.

The past season has been a most rewarding one for the falconers. It was a wonderful nest-hunting season, we have begun banding, and we are coming to receive enthusiastic public support. Speaking engagements throughout the province have provided good publicity for the group and have given the boys a chance to look at Saskatchewan. The climax of the year's activities, of course, came with the opportunity to fly our birds for the A.O.U.

Our season began long before the snow was gone when the spring nest-hunting expeditions found the boys combing the leafless woods for nests of the elusive Cooper's and Sharp-shinned Hawks. Happily, with a little luck and roughly 300-man-hours spent walking, we were able to locate six Cooper's and two Sharp-shinned plus 18 Great Horned Owl and 18 Red-tailed Hawk nests.

Most interesting, however, was the determined search for additional nest locations of the rare Prairie Falcon and Golden Eagle. After an

additional 250 man-hours, 2,000 miles of driving and three days of tenting in pouring rain we were overjoyed to report nine new Prairie Falcon eyries and three new active Golden Eagle nests. Also all of our previously reported nesting Prairie Falcons were again nesting, making a total of 14 known active nests for this species.

In all, 93 nests were recorded this spring and summer, with the following numbers for each species: Golden Eagle, 4; Prairie Falcon, 14; Pigeon Hawk, 9; Sparrow Hawk, 6; Cooper's, 6; Sharp-shinned, 4; Ferruginous, 5; Swainson's, 3; Red-tailed 18; Great Horned Owl, 18; Long-eared Owl, 2; Short-eared Owl, 1; Burrowing Owl, 3.

Unfortunately, only 18 immature birds were banded (Great Horned Owl, Prairie Falcon, Ferruginous Hawk), owing to lack of time, inexperience, and inclement weather. The nesting season was late and most of the nestlings too young to band when we arrived. Then late June rains made the earthen cliffs treacherous for climbing. However, we hope banding will become in the future one of our major undertakings, with a sufficient number banded to yield significant information, particularly about our native eagles and falcons.

Although it appears likely that there will soon be legislation at least partially protecting the birds of prey, we realize that legislation and actual protection are two quite different things. We cannot leave the whole matter to the government; we must make every effort individually to insure that rare species like the Prairie Falcon and Golden Eagle are protected. We can do this by persuading the residents of the areas where these birds nest of the importance of protecting them—through the press, public talks, and personal contacts with landowners. The landowner is the key figure, because the remote areas where falcons and eagles nest are virtually inaccessible except by roads through the farmsteads. This places the farmer or rancher in a unique position: he can screen all traffic into the rangeland. I am

pleased to say that this past summer we were able to insure protection of one of the eagle eyries and two Prairie Falcon eyries in this way.

To help inform people of the desirability of protecting these birds, I should like to volunteer the services of the Falconry Club, with slides, movies and our trained birds. Everyone in the natural history societies can help by making personal contacts with the owners of property where nests are found.

Egg collectors and nest robbers are our greatest problem, and I think on a provincial scale this is a matter of concern to our Natural History Society second only to the shotgun. On several occasions Great Horned Owl, Red-tailed and Cooper's Hawk nests were robbed of all eggs and young. Some of these young birds appeared later as so-called pets which became problems in different communities. Although falconers are often blamed for these renegade birds, no group is more opposed to this practice. One bird alone resulted in no less than 26 phone calls and one personal complaint to me, simply because people felt it must be one of our birds. No bird about which there were complaints in the city of Regina was owned or trained by the Falconry Club. This was not because our birds did not go free, but because those birds which did go free could care for themselves and reverted to the wild almost immediately. One of our released Prairie Falcons was observed for almost a month hunting



Photo by R. Fyfe.

Downy Ferruginous in a nest in the Big Muddy Valley.

less than two miles away, but it was very wild indeed.

Falconers deplore the keeping of large hawks and owls as **pets** because the people who take them seldom understand their needs. Usually the young are taken from the nest when they are very small and downy and appealing. Failing to get the right food, these birds suffer from nutritional deficiencies and develop a crippling form of rickets which renders them incapable of ever catching their own food. As they grow they develop such annoying habits as screaming, and they eat too much and simply outgrow their attractiveness. The next step is obvious—to release the birds. These freed birds have little chance for survival



Photo by R. Fyfe.

Nests of the Ferruginous Hawk on an eroded hillside in the Big Muddy Valley.

except by relying on humans for food. Therefore they stay near humans until they die or are shot. At this stage Great Horned Owls and Red-tails can be extremely dangerous. You have only to think of their strength to imagine what might happen if the bird should inadvertently land on a small child or pick at something in his hand.

Not only are we as falconers very much aware of the undesirability of keeping hawks and owls as pets, we

are doing our best to eliminate this practice through legislation. We feel that the taking of young birds should be rigidly controlled through a permit system similar to the present collecting permit system. This would ensure the establishing of definite regulations and the enforcing of them. In the meantime, every one of us can make a personal effort to see that others become aware of the need for protection of our native birds of prey.

The Big Snow of October

By **Frank Brazier**, Regina

On October 8, 1959, a low pressure area formed in the Pacific Ocean off the coast of British Columbia and moved eastwards. Ahead of it the temperature dropped to 18°F and by morning an inch of snow lay on the ground. After the low had moved inland a series of low pressure systems formed in the same original area and likewise moved inland so that a train of low pressure systems was created. The first in the series reached Regina about 7 a.m. on October 9 and by mid-morning it had started to snow in earnest, the wind increasing to 25-30 m.p.h. By noon of the 12th, snow 10.4 inches deep was underfoot. The disturbance finally extended to Battleford and Prince Albert in the north, the northern tier of states on the south and well into Ontario in the east. Western Manitoba actually bore the brunt as the systems stalled on the Turtle Mountains with the result that it snowed almost continuously, 30 inches piling up. After the 9th the wind was not troublesome but the temperature averaged 20°F minimum and 26°F maximum for the four days. These low temperatures iced much of the Wascana Creek system except for the open water caused by the Regina power plant's warm discharge, and the odd puddle here and there.

The power plant discharge kept half of the Wascana Marsh ice-free which was a boon to migrating waterfowl, and they piled in there in thousands to wait for better weather. Some stretches of Wascana Lake likewise did not freeze and these too were crowded. The tail-end of the migration of other birds found

conditions miserable but manageable and I saw no evidence of suffering. Myrtle and Orange-crowned Warblers gleaned the trees as did the kinglets and, surprisingly enough, the juncos. Hermit Thrushes and Robins went to work on the berry crop while White-throated Sparrows pecked into hanging fruit for the seeds. Most of the trees and shrubs still held their foliage which sheltered much of the ground from deep snow and in the hedges and under shrubs Harris and White-crowned Sparrows searched assiduously. Tree Sparrows and juncos fell on to weed heads while Purple Finches took samaras. Oddly enough I saw a House Sparrow also sampling the winged seeds of Manitoba Maple.

In Rotary Park, Wascana Creek remained open here and there where the water moved more quickly, and here Rusty Blackbirds and Grackles hung about in disconsolate groups; over one patch of open water a Kingfisher maintained a watch while a couple of Greater Yellowlegs and three Common Snipe moved from one pool to the other. At one of these a Sora searched the mud, retreating at my approach under a curtain of overhanging grass on the creek bank into an old muskrat burrow. It was tastefully arrayed in a pair of crystal gaiters which had formed as the water in which it waded froze its legs. This rail stayed until October 20 and when last seen appeared perky and in good spirits. During the most miserable day, the windy, snowy, cold 9th, I noticed the Kingfisher sheltering in a large drain from which he would make sorties to what open water remained.

On October 11 I stood on the bank of Wascana Lake watching the crowds of waterfowl on the open stretches — Mallards, Bufflehead, Ruddies, Gadwalls, Widgeons, Shovelers, Canvasbacks, Scaups, Golden-eyes, Blue-winged Teal, Eared, Horned and Pied-billed Grebes, Coots and gulls. Standing on the ice at the edge of the water was a Water Pipit and over the island a Sharp-shinned Hawk hovered and circled. Moving around the lake I eventually stood on the south bank looking north across a narrow channel to the island. A small stretch of open water was crowded with ducks, some of which immediately flew, but others, needing a run for a take-off, remained—three Pied-billed Grebes, three Ruddy Ducks, a female Scaup and four Coot. Idly scanning the group I noticed that one of the Coots was larger and then it turned its head and I saw two white patches on the head, and the profile of the bill—a scoter, but what kind? Much too small for a White-winged, so probably a Surf Scoter. An hour later I was back with Elmer and Reg Fox and a headful of facts—often the White-winged Scoter does not show the white in the wing at rest, and a large Surf Scoter is larger than a small White-winged Scoter. In a few minutes she told us which she was—she sat on her tail and flapped her wings vigorously: not a trace of white, so a Surf Scoter she must be.

There are not too many Surf Scoter records for Saskatchewan—Fred Lahrman lists six occurrences in *The Blue Jay* for March, 1958, and Dr. Stuart Houston reports Saskatchewan's "first resident bird watcher," Geo. F. Guernsey, in the

following issue as taking a specimen in the fall of 1883 at Fort Qu'Appelle and classifying it then as a rare migrant, first arrival date May 1.

Another larger hawk was seen briefly that day in the Legislative Grounds but too briefly to determine species. However, at the Cameron Street footbridge a large poplar held a fine Rough-legged Hawk—so nice to see one of the large buteos in a colour phase.

That day Fred Lahrman found an Arctic Loon on the Marsh. Elmer and I at that time did not see the loon close enough to identify it, but we found four unmistakable White-winged Scoters, 2 Hooded Mergansers and a Red-breasted Merganser on the following day. During the week Fred found seven Hoodies, two Common Mergansers and two Arctic Loons. It was not until the following Sunday, the 18th, that I found one of the Arctic Loons patrolling the edge of a great duck raft; an hour later Elmer Fox and Betty Cruickshank were also viewing it, at close enough range to note the straight lower mandible as well as general plumage details. There have been only two previous records for the province, Kronau (1947) and Nipawin (1948).

Among the ducks were some Ring-necks and Redheads and even a Pintail drake. There were Fred's Canada Geese, 13 Pelicans, a Great Blue Heron and several Western Grebes. A lone Marsh Hawk hunted the reed beds while a rowdy gang of 15 Crows abused us from the nearby trees. While the storm did have the effect of halting waterfowl movement southwards, I could not see that it had any visible ill effects in Regina among the migrants.

JUNCO RECOVERED IN ALASKA By S. Houston, Yorkton

Since 1943 I have banded over 16,800 birds of 137 species, but a recent recovery of a Slate-colored Junco is one of the most exciting of all. It is my first recovery from 381 juncos banded, and the junco is the 29th species for which I have a recovery. The junco was banded as an adult in our backyard banding station in Yorkton on October 3, 1957. It was killed by a cat at Soldotna,

Kenai Peninsula, Alaska, on July 10, 1959, and the band was given by its finder, Mel Carlson, to Mrs. Mary A. Smith, regional editor of Audubon Field Notes at Coho, Alaska. It had never occurred to me that some of the juncos that migrate through Yorkton are birds that breed in Alaska! This is another example of how a single banding recovery can be of great scientific interest.

Tennessee Warbler Banding at Nipawin

By Maurice G. Street, Nipawin

Tennessee Warblers are abundant in the Nipawin area each fall and are attracted in great numbers to the red elderberry bushes at my banding station. In 1952, after moving to my present location, I converted a simple drop trap into a special trap which has proved most successful. With it, I was able to band 2189 Tennessee Warblers between 1952 and 1958. My best years were 1952 with 462, 1955 with 389 and 1956 with 392. Only 86 Tennessee Warblers were caught between 1945 and 1951.

The trap is 36 inches wide, 48 inches long and 6 inches deep, and is made of $\frac{1}{2}$ inch mesh hardware cloth. Two holes two inches square are cut in the centre of the top. The two holes are only two inches apart, but they are separated by a vertical wire screen four inches high and 12 inches long, which also serves to guide the birds to the openings. Over the top of this screen, another piece of hardware cloth is fastened horizontally so the trapped birds are un-

able to see the holes through which they have entered. In other words, to the trapped birds looking upwards, the top now appears to have no openings from which to escape. Up to 30 birds can be taken at one time, with little chance of injury. Nearly 100% of the birds entering are retained; only the odd one accidentally escapes. A shallow pan 14 inches in diameter is placed with one edge directly under the two openings. Into this pan, water drips continually from an overhead container. The entire trap is painted a dull black.

This August (1959) was a record month for Tennessee Warblers, largely owing to a heavy crop of berries on the red elderberry bushes. Between August 1 and August 25 (when banding was interrupted by illness, with the migration barely past its peak) I was able to band 551 Tennessee Warblers, in addition to 41 warblers of other species. These birds were all caught in the one special trap. On six days no warbler was caught, owing to cold, rainy weather. The six best days were August 1, 2, 15, 20, 22 and 23, when 41, 42, 44, 59, 55 and 42 Tennessee Warblers, respectively were banded.

MYRTLE WARBLER WAVE AT KINLOCH

By Mrs. H. Rodenberg, Kinloch

Four Myrtle Warblers, the first of the season, were seen at Kinloch on May 8, 1959. During the next two days (May 9 and 10) there were hundreds of them passing through—at times when I looked out the yard would be covered with them. The neighbors also reported seeing large numbers. "We've never seen anything like it before." It was really a wonderful sight.

MOURNING DOVES NESTING IN OPEN FIELDS


By S. A. Mann, Skull Creek

This year I found four Mourning Dove nests in our alfalfa field (one with two young), and one in the pasture in the root of a gray sage. Also

when I was cutting alfalfa on a neighbour's field about five miles from ours I found another nest. All nests were on the ground. None of the birds returned to the nest after the nest had been cut over, not even the one with the young. I think that a Swanson's Hawk got the young from this nest as I found it during the morning and went to see it when I went cutting in the afternoon and there were then no young. They were too small to have walked away.

Has anyone else experienced finding Mourning Doves nesting away from bush? Taverner and others describe them as nesting "occasionally on the ground," but I have never heard of doves nesting in the middle of open fields. It wasn't for want of bush, as there is bush—poplar, aspen, willow, Manitoba maple, hawthorn, etc., within a quarter of a mile of any of their nesting sites.

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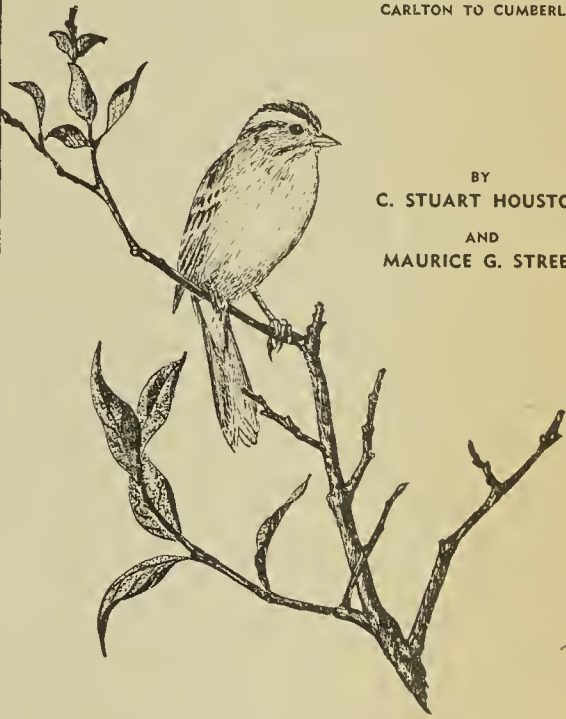
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UNUSUAL INCUBATION BEHAVIOUR OF THE RUFFED GROUSE

By Wm. Anaka, Spirit Lake

The spring of 1959 was exceptionally dry, resulting in extensive burning of dry marsh growth throughout the meadow area of the Spirit Lake district. One such fire on May 16 escaped into adjoining woods and burned over approximately 50 acres before being brought under control. All ground cover—leaves, brush and dead wood—was completely destroyed. While walking through the area next day I located a Ruffed Grouse nest, the sitting female readily visible owing to lack of protective cover. All surrounding ground cover, including part of the nest rim and the feather lining had been burned. The nest contained 11 eggs, two of these cracked by the heat. One cracked egg was examined and the contents were found to be thoroughly baked.

Throughout the summer the nest was visited on an average about three times a week. During the last few weeks of incubation visits were more frequent, as often as four times a day. During all these visits, totaling about sixty, the female was always on the nest except on one or two occasions. First indication of loss of incubating instinct was noted on August 5, and incubation ceased on August 7. In a total of ten visits during the last three days, the female was found on the nest only five times. On August 8 the eggs were abandoned and cold. Next day the nest was raided by a predator. Altogether incubation continued for at least twelve weeks, several times the normal incubation period for this species (24 days).

BIRDS IN AN APPLE TREE

By L. G. Saunders, Saskatoon

Rescue apple-crabs were so plentiful this year that our tree was not picked clean, and, standing outside the dining room window it forms an excellent bird-watching station. Throughout September and the first half of October a constant succession of birds visited it for the mealy, softened fruit. First of these were the Robins, as many as a dozen in the tree at once. With them, at different times, were Cedar Waxwings, White-

throated Sparrows, a Flicker, a Hairy Woodpecker, a Purple Finch, Juncos and an Olive-backed Thrush. I am not sure of the apple-eating habits of the last two, but all the rest were definitely eating the flesh, or perhaps the seed of the fruit. Of course, inquisitive House Sparrows came to see what they were missing, but did not stay to feed.

But the greatest prize was a male House Finch (or Linnet) which paid a brief call about October 15th. I was completely stumped by this stranger at the time and could find nothing like it in Taverner, but Salt and Wilk mention it as a rare visitor in Alberta. The red cap and eye-streak, red rump and rosy breast were very evident, and the fruit-eating habit is very characteristic; I did not know enough to look for the streaky flanks which Peterson gives as the best field mark. Since it was quite obviously not a Purple Finch nor a Redpoll there seems to be no chance of a mistake in identification. Possibly others along the migration route will have seen one of these rarities.

DECREASE IN DUCKS AT CUMBERLAND HOUSE

By Russell Robertson, Cumberland House

The ducks are decreasing in numbers every year at Cumberland House. The Pintail, Canvasback, Blue-winged Teal and Shoveler are very scarce this year. Even the Mallard and Scaup, our stand-bys, have shown a marked decrease.—October 8, 1959.

CHRISTMAS BIRD COUNT 1959

In your report, list the numbers of each species seen on the ONE BEST DAY between December 23 and January 3; in addition, list other species (number of individuals and date seen) between Dec. 23-Jan. 3.

SEND REPORTS AS SOON AS POSSIBLE TO

Dr. Stuart Houston,
Box 278, Yorkton, Sask.

The Yellow Lady's Slipper

By Marion Nixon, Wauchope

The yellow lady's slipper (*Cypripedium calceolus* L.) is found in our district in June, in favoured locations and wet seasons, in unexpected profusion. It grows on wild pasture, in the shelter between bluffs that are edging sloughs. After a series of wet summers, and especially after one autumn had created the ideal conditions for ripening and wind-sowing seed, we found yellow lady's slippers springing up every few feet, all across the gentle heights of land that separated various poplar-ringed sloughs on a half section of wild pasture. These individual plants increased rapidly in size with further favourable seasons. A single blossom to a stem is common, with two or three stems per root stalk. But when the wet seasons after 1944 gave them a prod into real profusion "a pair of slippers," both on a single stem, rewarded many a walk; at the same time, root formations spread in girth till they would send up six, eight, or occasionally ten leaf-cuddled stalks, each bearing its miniature yellow-kid moccasin. We found several that supported eighteen, and one even bore twenty blooms. This profusion continued until three years ago, when the water table under their habitat showed drastic recession.

Now this pasture is dry and heavily grazed, the sloughs are gone, and the lady's slipper meadows that so amazed and gratified us are shorn of their beauty. However, in our own adjoining field there is one wild corner, seldom grazed, which can be expected to explode back into profusion when once again the seasons so conspire.

I have been told that lady's slipper seed is virtually impossible for the amateur gardener to start. Certainly I have had no success. However, the plants move to a flower border quite easily, if care is taken to give them a natural habitat—sheltered from north winds, yet with plenty of sun, and with water nearby though not about their roots.

Because the flower stalk and leaf must be left to ripen down, storing their goodness in the root for the following year's growth, it is necessary to make a field trip in mid-

June to stake plants which one wishes to move. Then in early September, when another trip to lift them from amongst the overgrowth of grass is made, the stakes save endless time. Sharp eyes CAN pick out the tulip-shaped brown seed pod but only a few plants seem to set seed; the sere leaf is even more difficult to locate, so many other plants have used the sod since June.

The root is found three or four inches below the surface, and grows like a chunky mat an inch or so thick, with protruding short, fleshy roots that usually come up matted with clay. Many of these root mats are roughly saucer size, a few attain the size of breakfast plates, but it is only rarely we find one, roughly oval, as much as ten inches long. This would be enough to bear 15 to 18 blooms.

There are two other orchids growing on our farm, the greenish long-bracted orchid, *Habenaria bracteata* (Willd.) R.Br. and the saprophyte, *Corallorhiza striata* Lindl. The latter has disappeared again since the sloughs dried up which had provided the moisture to rot the willow and poplar deadfall upon which the coral root feeds.



Sketch by Helen Nixon
Yellow Lady's Slipper

W. C. McCalla Collection Presented to University of Alberta

By Elizabeth Cruickshank, Regina

It has been said that there has not been much written about plants that one might compare with the writings about birds. But Dr. McCalla wrote one flower book of quality, of sheer beauty of expression, describing the **Wild Flowers of Western Canada**. Now out of print, it is a most prized volume on our bookshelf.

In McCalla's book every lovely characteristic of a plant received comment, anything strange was noted; but he did not pass over the ordinary virtues, the modest distinctions possessed. The common Marsh Ragwort he described as adding to the June landscape a veritable "field of the cloth of gold," the cobwebby hairs on the stems and leaves looking as if spun from clear glass. The white trumpets of Wild Morning Glory he saw holding wells of nectar. About every flower he wrote as a

scientist not emotionally dead to its history, problems and excellences.

Knowing how flowers are slaughtered, Dr. McCalla wrote about the Saskatchewan emblem, the Red Lily: "The wild flowers are the culmination of Nature's efforts applied to plant life through millions of years. They should be the heritage of mankind for all time but the choicest are in danger of disappearing. We have learned to hunt song-birds with field glass and camera instead of a gun. Let us learn to enjoy wild flowers where they grow. Each has a life story well worth reading."

Dr. McCalla's illustrations make us feel as well as see the exceptional loveliness of form or colour, the smoothness or the crimple of the leaf texture, the relation of the whole plant to its natural surroundings.

The hope of Dr. McCalla's life was that all might find in the contemplation of the manifold beauties and wonders of Nature fresh joy, quickened sympathy, and an enlarged outlook on life. These are the things that a study of botany gave to his life, and through having enriched his life they further inspired all who came under the spell of his personality and teachings.

Now the tangible evidence of more than 65 years of collecting, photographing and recording plants on this continent has become a gift to the University of Alberta which conferred on him the honorary doctor's degree. A collection of herbarium sheets numbering over 14,000, together with field note books and photo negatives, were this summer safely installed in the new Biological Sciences Building of the University of Alberta at Edmonton. Now his work, his labour of love, will go on enriching and helping future generations of students; while for him, to use one of his own quotations:

The flower that on the lonely hillside grows

Expects me there when spring its bloom has given.

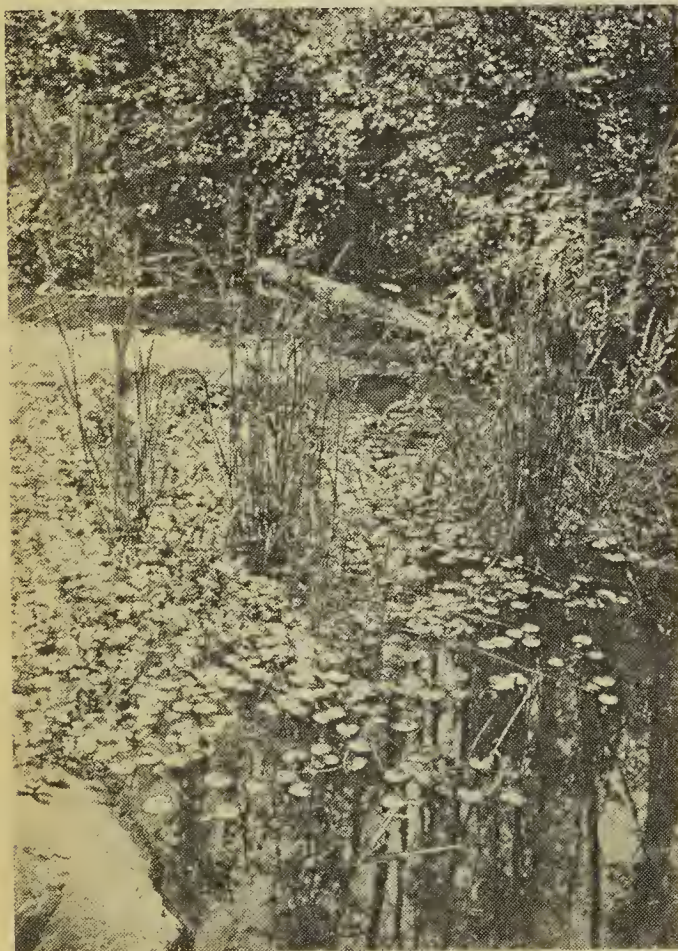


Photo by W. C. McCalla

A quiet pool on Dr. McCalla's farm near Edmonton with its rare colony of Floating Marsh Marigold (*Caltha natans* Pallas). This odd marsh marigold has stems and leaves that float, and from each node several thread-like roots reach for the bottom.

Smooth Blue Beard-Tongue



Photo by W. C. McCalla

Smooth Blue Beard-Tongue *Pentstemon nitidus* Dougl.

Pentstemon is a large and fascinating genus that reaches its highest development and greatest variation in western America. Abrams in his **Flora of the Pacific States** described 91 species, while only 17 are found in the vast eastern area covered by the eighth edition of **Gray's Manual of Botany**. In size they range from low mats on rocks to shrubs with stems ten feet long, and in color of flower from blue, purple, red, yellow to white.

Eight species are described by A. C. Budd in his **Plants of the Canadian Prairies**, one of them the Smooth Blue Beard-tongue. In the Calgary area it blooms from late May well into June. It does well in a garden. I moved a couple of plants from a dry hillside and planted them on the south side of my house in sandy loam where they thrived. In a few years they had formed a colony with at least 200 flowering stems—a beautiful sight.

New Record of Small White Water Lily

By E. Kuyt, Department of Natural Resources, Hudson Bay

This summer I found the Small White Water Lily, *Nymphaea tetragona* Georgi ssp. *leibergii* (Morong) Porsild, in Leaf Lake about 12 miles northeast of Hudson Bay, Saskatchewan. Since A. J. Breitung's "Annotated Catalogue of the Vascular Flora of Saskatchewan" (The American Midland Naturalist, Vol. 58, pp. 1-72, 1957) lists this species only for the Saskatchewan River near Cumberland Lake this is a new locality record for the species. A pressed specimen has been sent to the herbarium in Regina.

Since this species occurs in Asia and North Europe as well as eastern North America it is interesting to speculate about the absence of this plant in western North America. Has the species migrated across the Atlantic Ocean and is it still spreading westward? Was the species once circumpolar in its distribution until the last ice age pushed it out of northern North

America? In this case, too, it is probably now migrating westward.

The distribution of plants does change and it is interesting to consider the methods of dissemination of a water plant such as *Nymphaea*. No doubt the seeds of these plants are spread by water and once they become established in a river it will only be a matter of time before they are found at various spots downstream. But how do these plants "move" upstream or across divides? Leaf Lake and Cumberland Lake are on two different waterways and there are high hills between them. Since these lakes are on a north-south route much frequented by waterfowl I can't help wondering if seeds could be carried by birds. Could seeds remain viable while passing through the digestive tract of birds or can the seeds be carried externally, stuck to the feathers or feet? I would like to know.

A Second Can. Record of *Oxytropis besseyi*

By G. F. Ledingham, Regina

On August 8, 1959, while the International Grassland Tour was in Swift Current I had, thanks to J. B. Campbell and Keith Best, a brief opportunity to look at the herbarium of the Canada Department of Agriculture at the Experimental Farm. Among specimens of *Astragalus missouriensis* Nutt. I found one collection which did not fit. Superficially it looked like young specimens of *Astragalus missouriensis* for the leaves were silvery-canescens and the flowers were purple. Close examination showed that it was stemless, the type of pubescence was different and the keel was sharp pointed. This collection was actually *Oxytropis besseyi* (Rydb.) Blank.

In 1956 John H. Hudson found *Oxytropis besseyi* on a high butte south of Canopus, Saskatchewan. Mr. Hudson had his specimen identified by R. C. Barneby and it was reported in the **Blue Jay** (15:74, 1957) as the first record of this species for Canada. Mr. Hudson showed me the

site at Canopus in 1957 and I have one plant growing in the garden at Regina College. It has tight clusters of beautiful reddish flowers which apparently turn purple when dried as a herbarium specimen.

The specimen in the herbarium at Swift Current (No. 526) was collected by J. Looman, on the slope of an eroded hill at Val Marie, June 16, 1955. This location must be about 68 miles west of the Canopus location.

Oxytropis besseyi is a $2n=16$ species with relatives in Asia. It must, like man himself, have migrated into America through Alaska during some inter-glacial period and then spread southward. During one of the last ice ages it must have become extinct in Canada except possibly in the two locations reported here. It is interesting that this species has been unable to spread northward or has made but slow movement northward in the ten thousand years since the last glaciation.

New Records for a Bad Weed

By Keith Best and Archie Budd, Swift Current

POISON

SUCKLEYA



POISON SUCKLEYA (*Suckleya suckleyana* (Torr.) Rydb.) is an annual herb of the Chenopodiaceae or Goosefoot family, and is a native of the drier plains of Colorado, Montana, North Dakota and southern Saskatchewan. It is generally found along streams, slough margins and dried water-holes but is rare in Saskatchewan. It is poisonous to cattle and sheep due to its content of hydrocyanic acid.

The plant is generally of a somewhat prostrate habit, with stout much-branched succulent stems, often grooved and scurfy. The stems grow to a length of 12 inches or so

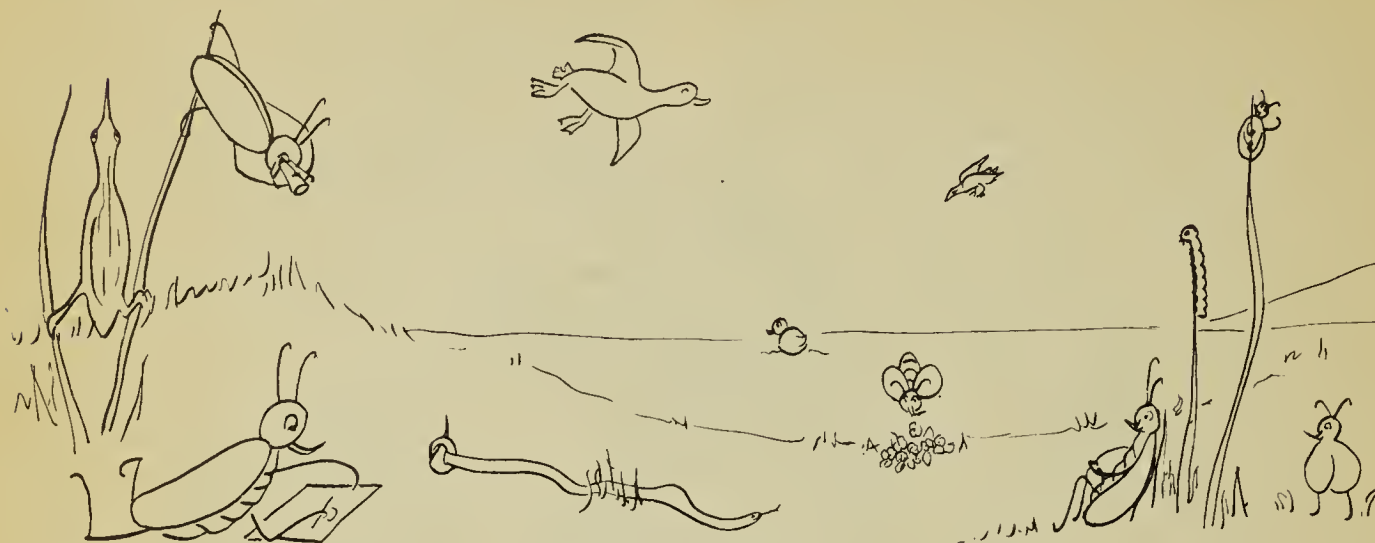
and bear stalked, alternate leaves, of a round or sometimes diamond shape and up to an inch in length. The leaves are irregularly blunt-toothed along the upper margins.

The flowers are unisexual, the male flowers being in the axis of the upper leaves, whilst the pistillate flowers are in the lower leaf axils. The pistillate flowers are enclosed in a couple of stiff winged bracts and the fruit is from $\frac{3}{8}$ to $\frac{1}{4}$ inch long, with an abruptly-pointed end.

This plant was found near Moose Jaw by Mr. Neil Gilmour, Weed Inspector, and has recently been found at Success, near Swift Current, and also near Vantage and Tuxford.

BOYS' AND GIRLS' SECTION

Edited by **Joyce Dew**, Saskatchewan Museum of Natural History



PRIZE WINNERS

Prize winners in this issue are Garnet Ward with his description of a grouse and Jean Gould with "A Comical Pet." Garnet describes grouse well with "They waddled off into a ditch." Jean's story is an entertaining one about an interesting pet. We get a number of stories about pet crows but every once in a while one is too good to keep.

The pupils of Lake Marguerite School carried out a commendable project with the study of trees in their district. We do hope more schools undertake projects of this type.

CONTEST RULES

Any young person may submit material for this section of the **Blue Jay**. The entries must be first hand observations in the form of letters, stories, poems, black - and - white sketches or photographs. Letters should not exceed 500 words. All entries must be accompanied by the name, age, and address of the sender.

Book prizes or magazines subscriptions will be awarded with each issue of the **Blue Jay**. Special prizes will be given from time to time to teachers who encourage their pupils to write or who sponsor nature activities about which the children write.

Send in your nature observations to Boys' and Girls' Section, **Blue Jay**, Miss Joyce Dew, Saskatchewan Museum of Natural History, Regina. The closing date for the next issue is January 15, 1960.

GROUSE

by **Garnet Ward**, 8, Elrose, Saskatchewan

Once when we were on our way to Saskatoon, and were just entering Rosetown, Dad said, "What are those birds?" Mom said, "I think they are grouse." I said, "I think so too."

They were brown with what looked like bars on their wings and back. They waddled off into the ditch.

I was quite surprised and happy to see grouse.

A MOURNING DOVE

by **Sharon Evans**, 12, Nipawin, Sask.

Snow lay everywhere although it was only October 10th. We were driving to our farm when a bird flew up from in front of the car. At first we thought it was a Gray Partridge (Hungarian Partidge). Imagine our surprise when we discovered it was a Mourning Dove. It had been pecking at the gravel on the side of the highway. It was the first time I ever saw one that close.

Mr. B. de Vries, Box 342, Fort Qu'Appelle, Saskatchewan, would like to correspond and to exchange plants with others who are interested in plants. Perhaps Mr. de Vries can help you with some of those difficult species.



COMMON LOON



SANDHILL CRANE

BIRD OBSERVATIONS

by **Judy Dubasov**, 14, Kamsask, Sask.

I have enclosed two sketches. The one of the Loon was made after I saw one swimming happily on our dugout in our pasture. I might add I HEARD it too!

The Sandhill Crane is one which comes to our farm every so often. My father saw it and heard its trumpeting call, but did not know its name. He told me that they were quite common many years ago, but now seem to have disappeared. When I finally saw it, I consulted a bird book, and found it was a Sandhill Crane. It is standing (in the

sketch) in a field in the same spot that a slough, now long dried-out, once occupied.

THE GREAT BLUE HERON

by **Lawrence Scraba**, 15, Calder, Saskatchewan.

My brother Lenard and I were going for the cows, we spread apart to find them sooner. I went on a cow path to one slough and Lenard went to the other. As I was coming to the slough I saw a great big bird lying on the ground. I went close to it and found that it was dead. I didn't know what kind of bird it was, I picked it up by its feet and took it home.

Lenard didn't know what it was either. We took it to school to show the bird to our teacher, Mrs. Dere-nowski. We told our teacher where we found it. She thought it was a Blue Heron and verified it by looking it up in the encyclopedia.

The bird measured from the beak to the tips of the toes four feet, seven inches, and the wing spread was six feet. It had twelve tail feathers. It was a huge bird. Grandfather told us he saw it all summer long but why it died we do not know.

A LAKESIDE OBSERVATION

by **Ralph Underwood**, 12, Strasbourg, Sask.

One calm sunny September evening I was observing the lake from the top of the bank. While doing so I noticed a large black bird with white spots on its back swimming around in the water about twenty feet from shore. Suddenly it dived under water and so I ran down the bank to the water's edge and lay down in the sand. Shortly the bird surfaced and I realized it was a Common Loon. Again it dived but presently it came to the top and in its bill was a minnow. After the loon got the minnow going in the right direction he swallowed it.

My younger brother and sister seeing me on the shore, came running down the bank. This scared the loon away.

I saw the loon quite often after that.



TREES OF LAKE MARGUERITE SCHOOL DISTRICT

A group composition by
**Claire Francaise, Marcel Francaise,
Annette Francaise and
Lynne Simpson.**

Our school is situated on the edge of the beautiful Red Fox Valley about eleven miles south-east of Indian Head, and just a mile east of Lake Marguerite. On a recent hike to a nearby ravine we observed 12 varieties of trees and shrubs.

The three tallest trees are the aspen, poplar, birch and elm. The poplar and birch look alike, but on second glance we see that the birch has silvery white bark, while the poplar bark is a greenish white; also the poplar has a single trunk, the birch grows in clumps of two or three. The elm has rough gray bark, and upcurving branches.

All three trees have now yellow leaves; the poplar leaves are almost round, the birch leaves are notched and pointed, and the leaves of the elm are large and oval.

Saskatoon, chokecherry, and pincherry bushes of all sizes grow in thickets. The shapely pincherry can be easily recognized by its slender, drooping, russet leaves. Saskatoon leaves are crimson, chokecherry almost the same colour, but it can be distinguished by the white specks on its bark. We can also tell them apart by the dried up berries; the Saskatoons are purplish, the chokecherries bright red.

Hawthorns and rosebushes both have thorns and crimson berries, but the rose has brilliant red leaves. The dogwood leaves are the darkest red of all, and it has white berries. The hazel bush has waxy green leaves with a silvery underside, and furry nuts. There are several varieties of willow, some now yellow, some russet, and some brown. Only the tough old wolf willow keeps its silvery coat until winter.

A FRIGHTENING EXPERIENCE

by **Mildred Boon**, age 11, Maryfield,
Sask.

One morning when I was going to school I saw two coyotes on a small knoll. They just sat and looked at me, then one started towards me. The other was more timid and lagged behind. I wasn't afraid because it was broad daylight, but then, both began loping after me. I shouted! They kept coming. I screamed! They stopped. Then I saw Allan on his pony up by the creek. I began to call to him, to stop, come back. As I began running towards him, he turned his pony around and urged it back. I had a syrup pail of water and a lunch kit to carry, which slowed me down. Finally I caught up with Allan. I was all out of breath and couldn't run any more. After I had got my breath again, we walked rapidly to school. The coyotes stopped following us when we got to the clearing near the school.

I hope I never meet those coyotes again.



WHISTLING SWAN

by Ron Klimack, 15, Russell, Man.

A COMICAL PET

by Jean Gould, age 13, R.R. 3,
Lloydminster, Sask.

Last spring we found a young crow who had a broken leg. We brought him home and fixed up a cage to keep him in. We named our crow Dave.

At first we fed our crow eggs. Later on we fed him Saskatoons, peas, cauliflower, cabbage, fish, bread and raw meats of all kinds. I think he liked liver and hamburger the best of anything.

In the late summer when the crows were flocking to go south we put a band on Dave and let him go. Dave didn't go. He decided to stay with us.

He became so tame that when we took out a bit of food for him, he would come and sit on our arm or shoulder. Then we would give him the food and he would fly up on our heads and eat it. If the bread we gave him was too dry he would fly to the water tank and dip it in the water tank before eating it! If Davie didn't want all the food we gave him he hid some of it. Sometimes when he got it out to eat a cat would try to steal his food from him. He had a good way of getting around that. After the cat took his food he would hop around behind it and tweak the end of its tail. The cat would jump and run away and there was Dave with his food again.

After awhile Davie got pretty good at imitating. One day when Mom was out gathering the eggs she heard a hen cackle by the barn. She walked over to the barn and started to hunt for the nest. Then the hen cackled again. It seemed to be coming from up high. Mom looked up and there

on the barn roof was the culprit. Davie! Whenever Mom went out she always said, "Hello" to him.

One day Mom went out and there was no signs of Davie so she did not speak. Then across the yard came, "Hell-O-O-O." Davie had spoken his first word. After that he was always saying "Hello" to us.

In harvest time Dave always went up the field with Dad. He would stay up there all day and fly home at night with Dad.

Dave stayed with us for a long time, then one morning he was gone. In a couple of days the weather turned cold. I guess Dave knew the cold weather was coming.

Davie was a very comical pet. He was always doing something funny. I hope he comes back in the spring, but if he doesn't I am going to get another crow for a pet.

GREAT BLUE HERON

by Paul Vernon Fowler, 12,
Carrot River, Sask.

On the morning of September 8, I was going out to help with the chores on our farm east of Carrot River when I sighted an unusual bird on our pond. Getting closer I recognized it as a Great Blue Heron. I later checked its identification with Roger Tory Peterson's **Guide to Western Birds**, and discovered that I was correct. The Great Blue Heron stayed at the pond until the 22nd of September. It fed on the 2-3 inch "Sticklebacks" that are numerous in our pond. Before it left I was able to approach to within 15 feet of it. When standing its height was at least 3 feet. Its plumage was blue-grey. Its flight was slow and very graceful. The only other bird on the pond at that time was a Greater Yellowlegs.

HAWK OBSERVATIONS

by Marvin Hrynowsky, age 11,
Rhein, Sask.

While I was walking on the road after I did my chores I saw a hawk carrying something in his beak. I wanted to see what he had so I followed him for a while. Then he sat on a tree and swallowed it. He stayed on the tree for a while and flew away north. I didn't quite have any time to follow him through the snow because he was flying too fast. He was gray in color. His wings were real wide. He flapped all the way through the brush.

Winter Bird Feeding

by **Fred G. Bard**, Sask. Museum of Natural History

At the S.N.H.S. annual meeting on October 17 the Moose Jaw Natural History Society distributed a list of birds and the kinds of food they would come to, with drawings of several types of winter feeding trays. Inquiries are coming in requesting information about feeding trays and foods, etc., and for this reason we would like to share your experiences by bringing them to the attention of other readers. Would you send to your Editor pictures of feeding trays that you have found successful, telling us of feed used.

Before the 30's we operated a feeding station back of the Normal School in which the Museum was housed. We brought in a few sheaves of various grains and put out a feed bed, scattering various kinds of grains for the birds. It was not long before we had a covey of Gray Partridge which fed daily and stayed during the cold winter. One thing that is often overlooked in feeding trays is the necessity of having grit or gravel handy at all times.

Almost every library can make books available on the various types of feeding trays. Many of these are quite elaborate; therefore some general suggestions regarding the most successful types are needed. Often students of birds can supply practical details lacking in the books.

The feeding tray should be an elevated platform in order to give the birds some protection. It should have a canopy or cover (see figs. 1, 2) which prevents the snow from covering it. A hopper is desirable for a single filling could then serve probably a week or more at a time. I remember some years ago when Lloyd Carmichael, our former editor,

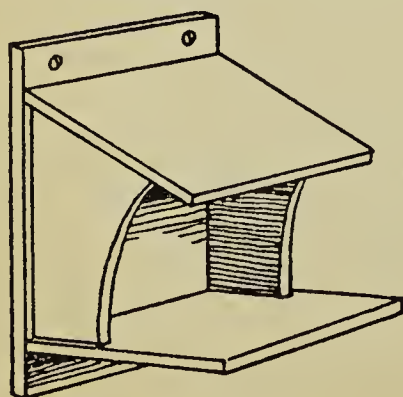


Fig. 1 Platform tray

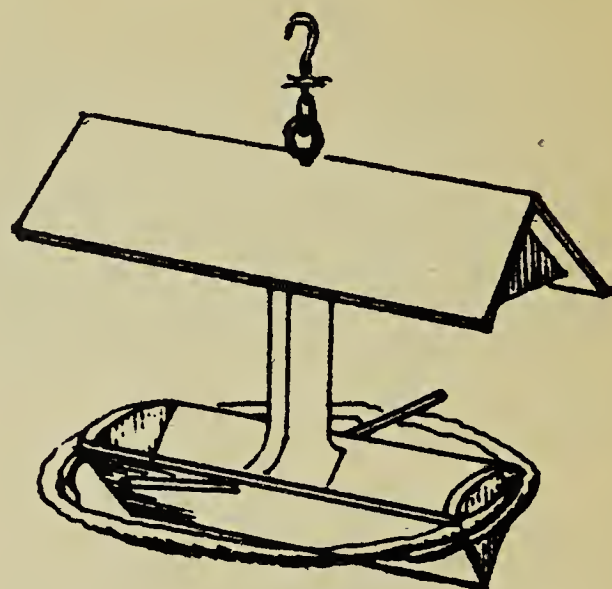


Fig. 2 Suspended trough with roof.

gathered clusters of chokecherries and hung them out for the waxwings and other birds. It occurs to me that when these berries are plentiful we might gather a pailful and put them in a deep-freeze in small plastic bags to make them available to the birds during the winter months. Suet and similar types of food suit woodpeckers and chickadees very well; this can be fastened to the trunks of trees in protected areas. Our former treasurer, Elmer Fox, and Frank Brazier, former president of the Regina Natural History Society, have had feeding stations for winter birds in the Legislative Grounds.

Be sure to study the types of birds you are likely to receive as visitors and provide the foods most acceptable to them. Last winter I had a feed bed for Gray Partridge on the Wascana Creek and these birds visited the feeding ground regularly, and by spring I had coaxed in four Sharp-tailed Grouse. This was unusual, for building development is going on all around. So, in addition to the regular visitors, one can expect a few very pleasant surprises with winter bird visitors.

**CAN YOU NAME THE
BIRDS ON PAGE 143?**

**Write to your Boys' and
Girls' Editor, Miss Joyce
Dew.**

Some Recent Mammal Records

by **R. W. Nero**, Saskatchewan Museum of Natural History

The Museum regularly receives a variety of animals submitted for identification from readers of the **Blue Jay** and the general public. All of these specimens provide valuable distribution data and are processed accordingly. A few recent mammal records, however, warrant special attention.

Pygmy Shrew (*Microsorex hoyi*)—two specimens, both captured in a cesspool at Naicam, Sask., on July 23, 1959, by **Mrs J. Missler**. Only half-a-dozen records are available for the province.

Small-footed Myotis (*Myotis subulatus*)—the second specimen for the province was collected on June 27, 1959, in the South Saskatchewan River Valley north of Main Centre by **A. Swanston** and **B. McCorquodale** who also found the first specimen (see **Blue Jay**, Dec., 1958). This specimen was found alive lying on the bare ground in a gully in a sandy outcrop after a rain.

Red Bat (*Lasiurus borealis*)—a male specimen sent in from Tullis, Sask., on Sept. 21, 1959, by **Mrs. E. Barager**, provides a new locality record.

Hoary Bat (*Lasiurus cinereus*)—a female with half-grown young was collected at Yorkton by **Dr. S. Houston** on July 19, 1959. (For information on other breeding data see **Blue Jay**, Sept., 1958).

Gray Squirrel (*Sciurus carolinensis*)—two previously unreported records; a pelt of an adult received from **J. Provick**, caught in a mink trap near Esterhazy, Sask., in January, 1958, and an adult female specimen received which was shot near granaries at Edenwold on March 11, 1959, by **G. Markel**. These are both new locality records.

Olive-backed Pocket Mouse (*Perognathus fasciatus*)—Specimens are on hand from four new localities in Sask.; one at Boharm, May 13, 1959, taken by **A. Swanston**; one from Gainsborough, May 25, 1959, by **J. Reynolds**; one from S. Sask. River valley north of Main Centre, on July 7, 1959, by **R. Nero**; and one from McCord, Sept. 22, 1959, by **E. Kuyt**. An additional series of 14 was collected in two hours at night on Sept. 17, 1959, about 7 miles west of Hatfield in a previously reported locality.

The pocket mouse which was collected at McCord was a female which had a greatly enlarged and discolored liver. It was submitted to Dr. H. O. Dillinger, bacteriologist at the Provincial Health Laboratory, Regina, who made the following diagnosis: the cause of the liver swelling and the yellow patches has been ascertained as *Capillaria hepatica*, a whipworm. This parasite is a

(Continued on page 173)

Northern Records of the Woodchuck

by **Peter Gregg**, La Ronge

Beck's **Guide to the Mammals of Sask.**, (see **Blue Jay**, March, 1959, for review) records the Woodchuck (*Marmota monax*) in Prince Albert National Park, but has no records of this mammal occurring further north. Since moving to La Ronge this past summer I have seen them along Highway No. 2 from roughly Mile 80 (22 miles south of La Ronge) to the vicinity of the Potato Lakes at Mile 95 (about 7 miles south of La Ronge). The road mileage system starts with Mile 0 at Waskesiu and terminates at La Ronge which is about Mile 102. The mileage numbering on the Uranium City Road, of which 25 miles are now complete.

starts at La Ronge with Mile 0 all over again.

In the area frequented by the woodchucks there are quite a few sandy banks where I suspect they have their burrows. I have looked at one road kill in July along the extent of road mentioned and on various trips have seen a total of 8 or 10 woodchucks along the roadside.

ED. NOTE: Dr. Gregg, formerly with the Dept. of Nat. Resources, is now working as a free-lance writer and has just recently moved to La Ronge. He holds a Ph.D. degree in conservation from Cornell University and is strongly interested in wilderness areas and life out-of-doors. We wish him lots of luck and hope to hear more from him about the La Ronge area.

In Memoriam: Allan John Hudson

by Fred Robinson, Regina

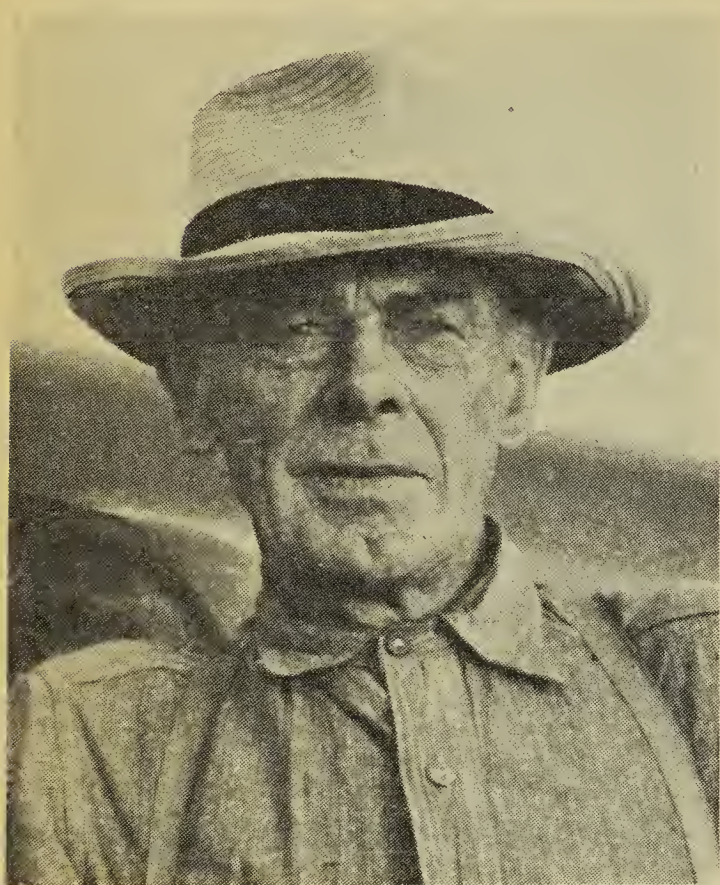


Photo by F. G. Bard
ALLAN HUDSON

On September 29, 1959, death claimed Allan John Hudson of Mortlach, well-known amateur archae-

ologist, who has on many occasions made splendid contributions to the pages of this publication. Mr. Hudson was 70 years old and had spent his life since coming from England at age 16 in the Mortlach area. Originally he came from England in search of better health but he decided to stay in Canada and seek his fortune homesteading. He became a keen student of the origin of man. This interest induced him to study archaeology and on that subject he published many articles, a number of which appeared in these pages.

Perhaps Mr. Hudson's most notable contribution to archaeology was made when the Mortlach "Besant Site" was discovered in 1948. Later, in 1954, this site was thoroughly excavated by Boyd Wettlaufer, and one of the most eager helpers in the project was Mr. Hudson. Although an amateur he truly loved to work as a professional, which he did with the finest enthusiasm.

Mr. Hudson's contributions to this publication will be missed and his friendship to all members of our society will be mighty hard to replace.

More Painted Turtles

I enjoyed the article on the Painted Turtle in Saskatchewan by Charles D. Bird in the September issue of the **Blue Jay** very much as I am interested in that sort of thing, although I had never seen one of these little creatures until I read the article. However, last Friday afternoon, Sept. 11, an adult Painted Turtle made its way from somewhere into the barnyard at the Experimental Farm here at Indian Head and one of our employees brought it up to my office as he was afraid it might get killed or injured. Needless to say, I was delighted to see it and, as we are farmers south of Indian Head, I took it home with me and put it into our dam, where I hope it will be safe. I presume this was an adult turtle as the shell was 7½ inches in length. It was not injured in any way, and was presumably in good condition because the

colours on the shell underneath were very bright, also on its legs and the rest of its body. We are approximately 14 miles due south of the Qu'Appelle Valley here, so that is quite a hike for one of those little creatures, if it did come from the valley.—**Mrs. L. E. Kirchner**, Indian Head, Sask.

We saw a Painted Turtle on Renfret Creek, a tributary of the Souris River, this summer while golfing. This we examined closely and noticed its resemblance to a Tortoise that we had for a pet some years ago. The shell size is approximately seven inches by five inches. After further discussion, we found that Mr. R. Williamson of Weyburn saw a great number of these turtles sunning themselves on a river bank some years ago.—**Keith D. Baker**, Weyburn, Sask.

Blue Jay Bookshelf

THE BIRDS OF THE SASKATCHEWAN RIVER, CARLTON TO CUMBERLAND. By C. Stuart Houston and Maurice G. Street. 1959. Saskatchewan Natural History Society, Special Pub. 2, 205 pp., 4 maps, illus. Price \$1.50.

In this volume the authors have brought together a mass of carefully compiled and unusually well-documented data from many sources, some of them obscure, on the birds known to occur at present and in the past along the Saskatchewan River between Carlton and Cumberland. Needless to say the results are an indispensable reference work for all who are interested in the ornithology of that part of Saskatchewan. The usefulness of the work, however, greatly transcends the geographic scope indicated by its title.

For over a century the historic Saskatchewan River was part of the main interior route to the great Northwest. It is scarcely surprising, therefore, that some of the specimens collected along its banks by naturalists in those exploratory days represented species and subspecies then unknown to science. The original descriptions of species like Clay-colored Sparrow, Forster's Tern, Olive-sided Flycatcher, Gray-crowned Rosy Finch, and Smith's Longspur, are based on specimens collected along the Saskatchewan. Type localities like Carlton House and Cumberland House have become familiar to all persons doing taxonomic and nomenclatural research on North American birds. To most, however, these ornithologically important place names are familiar by name only and the descriptions of the site of old Fort Carlton and of Cumberland contained in this volume are of particular interest.

The senior author has spared no effort to study the records of the expeditions concerned, particularly those of the first and second Franklin expeditions. Thus he is able to present considerably more significant ornithological information about them than has appeared heretofore under one cover. As one example, through the study of an article in an obscure botanical publication he was able to ascertain that the type local-

ity of *Sterna forsteri* is some 10 to 50 miles west of Cumberland in Saskatchewan instead of considerably east of that place probably in Manitoba as has heretofore been supposed.

The bulk of the book (pages 35-199) is devoted to a very scholarly account of the 259 species of birds known from the area. An additional seven species are of the hypothetical status. For each species the status, history, and distribution are treated under five headings: River, Carlton to Cumberland; Carlton; Prince Albert; Cumberland House; and Nipawin. Pertinent data from the records of the early naturalists like Richardson, Drummond, and Blakiston through to those of the contemporary observers are presented and these include some heretofore unpublished records of the contemporaries. A feature of the contemporary work is the particularly mature knowledge of the Nipawin region gathered mainly by the junior author. Of 241 species recorded there he has found the nests of no less than 131 and has records of flightless young of another 10. He presents succinctly much information on migration dates, nesting dates, and nest sites. It is interesting that the authors consider Nipawin may be the site of the earliest (July 24, 1691) record of the Passenger Pigeon in western Canada.

The historical and biographical notes (pages 5-21) and the numerous historical data usefully interpreted and scattered throughout the text are an extremely valuable aspect of the work. Also cleared up are a number of points concerning place names in the area and some vague terminology used by the early naturalists. There are four maps, two photographs, sketches of Richardson and Drummond, and a frontispiece drawing of old Fort Carlton. The book closes with a very useful bibliography containing much historical source material, some of which has been overlooked by ornithologists.

The authors are to be highly commended for their initiative and thoroughness in producing this scholarly work which doubtless will retain its usefulness for a long time to come. The Saskatchewan Natural History Society also is to be commended for

making such a useful publication available at such a modest price.— W. Earl Godfrey, National Museum of Canada.

BIRD WATCHERS' DATE BOOK. Colonial Publishing Inc., 10 Thacker Street, Boston, Mass. Price \$1.65.

This little notebook (about 7 inches by 5½ inches) is called "an illustrated engagement calendar" by the publishers. The spaces provided under headings Morning, Afternoon, and Evening, might well be used for engagements or might be used by the avid birdwatcher for observations to supplement those made in the spaces provided for the owner's "bird notes this week." The cover has a colorful illustration featuring the Baltimore Oriole and each page of notes is illustrated by a black and white sketch of a bird. The only criticism one can offer of this handy little book is that about one-quarter of the birds discussed are unknown, and another quarter are uncommon, here on the prairie. It would, however, be a suitable gift for friends on the eastern seaboard. — Marjorie Ledingham, Regina.

FLORA OF ALBERTA. By E. H. Moss. University of Toronto Press, Toronto 5, Canada, October 3, 1959. Price \$10.00.

This book, printed in the Netherlands for the University of Toronto Press, has 546 pages. The paper is excellent and type is clear and easily read. There are no illustrations but it would be impossible to include pictures of all the plants and still sell the book so reasonably. The book is a technical manual giving keys to separate all the different species of vascular plants and giving a brief description of the appearance and distribution of each species.

Dr. E. H. Moss, Professor Emeritus, University of Alberta, has made a real contribution to the botanical literature of Canada. For the first time all known information about the plants of Alberta has been collected together under one cover. This has been a tremendous task for in Alberta the range of habitat is extremely wide. In the southeast corner of the province on a dry bank one location of *Yucca glauca* Nutt. is known. In the high mountains along the southwestern part of the province there

are many alpine and western species with restricted ranges. The province extends northward through different types of grassland and forest to include plants like *Astragalus yukonis* Jones which are found only in the most northerly parts of Alberta.

Dr. Moss has made free use of previously published lists and manuals of the plants of Alberta and adjacent regions. He has examined several extensive plant collections besides the University of Alberta herbarium which includes his own collection of 12,000 specimens. For 35 years Dr. Moss has been in Alberta as a professor of botany at the University. He was certainly the man to make, as he says in the preface, "a pioneer effort to record and describe the vascular plants of Alberta with keys to their identification."

Dr. Moss makes special acknowledgment of the help that he has received from the published catalogues of Dr. H. M. Raup, National Museum (for Northern Alberta), and the lists of our Saskatchewan-born Mr. A. J. Breitung who collected in the Cypress Hills and the Waterton area. He also pays special tribute to the excellent and extensive collections of Dr. G. H. Turner of Fort Saskatchewan, and Dr. W. C. McCalla of Calgary, whose photographs are so well known to **Blue Jay** readers.

In spite of the fact that this work includes 1605 species and 215 varieties in 499 different genera in 104 different plant families, Dr. Moss modestly admits that there are probably other species which should be included. Anyone who has specimens not included in this book is invited to send the specimens to Dr. Moss, Botany Department, University of Alberta, so that supplementary lists may be made up.

All floras of any value must, in order to be accurate, be rather technical. Dr. Moss' **Flora of Alberta** thus presents something of a challenge to the amateur botanist, but anyone with persistence can master the keys, and by checking the descriptions can be reasonably sure that he has properly identified the plants which he has collected. Difficult species may always be sent to the closest herbarium for verification.

The families are arranged as they usually are in the more comprehen-

sive floras of North America. Genera are arranged alphabetically within families and species are arranged alphabetically within genera. This means that true phylogenetic relationships are not shown between species, genera or families. Some phylogenetic relationship is shown in the keys, for instance when a large genus, e.g., *Carex* which has 123 species in Alberta, is divided into sections. Dr. Moss explains that he has used an alphabetical arrangement to avoid use of numbers which would add to typesetting costs. However, one regrets that he has not used a natural arrangement which would show relationships as he sees them.

There will always be disagreements among botanists about the correct names for different species. Dr. Moss frankly admitted in conversation with me that there were many cases where he did not know just what to do about the names. Fortunately for those interested in plants of the western Canadian provinces he has not waited to settle all his doubts before publishing. Looking at some of the nomenclatural problem spots I find that Dr. Moss has been conservative in his approach and I feel that he has made his decisions carefully. There will be some name changes in future editions. Botany is interesting partly because there is still so much to be learned and changes in names simply indicate our growing knowledge.

When I was in Alberta this past summer on the Grassland Tour which preceded the International Botanical Congress I added a number of Alberta plants to my collection. Some of these were new collections for my herbarium, like *Danthonia parryi* Scribn. from the Stavely Range Station and *Saussurea densa* (Hook) Rydb. from Tableau Mountain. I still have at least a half dozen unidentified plants which I shall look for in Dr. Moss' book. It is as such a working tool that the **Flora of Alberta** will prove most useful. People of Alberta are fortunate in now having a complete manual of the vascular plants of their province. It will be of considerable value in British Columbia and Saskatchewan, too, for in many genera exactly the same species occur in all three provinces. — George F. Ledingham, Regina.

MUSHROOMS. By Albert Pilat and Otto Usak. Spring Books, London. 56/6.

Produced after six years joint effort by this mycologist-artist team this book contains 120 8 x 11 inch color prints of mushrooms at natural size showing gill structure, stem cross-section, and with color sketches of spores.

The introduction deals with the morphology, biology, anatomy and histology of the higher mushrooms. There is a chapter on mycorrhiza, the symbiosis of mushrooms and trees. Propagation is discussed. There is a list of edible mushrooms, an analysis of nutritive value, a copy of the Czech food regulations, recipes and a chapter on mushroom poisoning.

The bibliography lists works of Bolton, Buller, Fries, Ramsbottom, and Schaeffer, but not Christensen, Smith or Thomas Gussow and Odell are mentioned in the chapter on poisoning but not in the list. Apparently the author is more familiar with the works of Europeans than with those on this side of the Atlantic.

Among the edible mushrooms the author considers *Armillariella mellea* inferior, a choice which is certain to be disputed by local mycophagists.

Any book of this size (340 pages) cannot include all the individual species of agarics, and several are not listed, however mushroomers will find it a valuable reference.—Tony Capusten, Prince Albert.

CONSERVATION DIRECTORY (1959). A listing of Organizations and Officials concerned with Natural Resources. National Wildlife Federation, Washington, D.C. Price 50c.

A copy of this directory of organizations—government and private, national and regional—concerned with conservation, comes to our president, and anyone wishing to do so may borrow it. The directory includes international, and Canadian and Latin American, as well as American organizations.

(Continued from page 169)

selective rodent inhabitant and always chooses the liver for accumulation of its eggs. Two human cases have been described, one from India and one from Panama, possibly through eating of edible predator—meat.

Notes and News from Members

A gratifying number of letters have been received from **Blue Jay** members who want to share with us their experiences of nature. We like to print excerpts from as many of these letters as possible.

Birds are always popular with our readers. **Mrs. Osmund** of **WHITE BEAR, SASK.**, tells about the birds that especially thrilled her this past year—a Rose-breasted Grosbeak in spring, a Ruby-throated Hummingbird in August, and warblers, vireos and thrushes in fall migration. Cedar Waxwings are apparently rare birds at White Bear. With another winter upon us, **Mrs. Ona Link** of **DAVIDSON, SASK.**, recalls the thirteen huddled Gray Partridge that made a round dark mass in the fresh snow only 10 feet from her window after a winter storm. This year's unseasonal early October snow brought a scolding House Wren into the house with some geraniums that were being rescued by **Mrs. Keith Paton** of **OXBOW**, who sends us many bird notes. **Adolph Miller** of **FORGAN** tells of Meadowlarks suffering in the storm. He counted 11 dead birds in a two-mile stretch of Highway #44, along which he noted large numbers which appeared to be suffering from the cold and deep snow cover. Mr. Miller also mentions a junco-like bird seen feeding with juncos, which had a white head and white on the wings. We suggest that this was probably a partial albino. Albinos often occur, and **Amelia Laskey** of **NASHVILLE, TENNESSEE**, sent us a photo of albino Blue Jays because she thought the **Blue Jay** magazine would be interested in them.

Another example of an albino is the white sandpiper seen by Mr. H. E. Mawson and A. T. Murray Evans of Dundurn near Kenaston, May 20, 1959, and reported to us by **D. Murray**, of **LAIRD, SASK.**

Another frequent contributor is **J. David Chandler** of **MASEFIELD, SASK.** He wrote some time ago to describe a dramatic moment when he watched a mother antelope come to protect her fawn from a swooping Golden Eagle, and a recent letter asks for suggestions for controlling House Sparrows. Mr. Chandler has watched House Sparrows this year take over nesting sites of Eastern

Phoebes, Eastern Kingbirds, Western Kingbirds and Barn Swallows.

Mrs. E. A. Dodd of **ERINFERRY, SASK.**, in the bush country south of Big River writes that there seemed to be more birds there this year. A quite unusual bird, that Mrs. Dodd thought might be a Poor-will, arrived on June 1 and rested there within sight of her window throughout the day. We would guess that the warblers Mrs. Dodd mentions were Myrtle Warblers rather than the very similar Audubon's, which would be well beyond their normal range at Erin ferry. A colony of bats discovered in August prompts Mrs. Dodd to ask whether bats go south to hibernate. It appears that they do, although hibernating bats have been found in Sask. (see **Blue Jay**, 17:78).

The variety of wildlife at **CREELMAN, SASK.**, is described in a letter from **S. N. Horner** . . . flickers nesting at the farm in the old cottonwoods, gray squirrels apparently finding a home in a small 10 in. culvert lying under apple trees, and deer and the occasional elk wandering out of the Moose Mountain game preserve.

Jim Dubray of **SWAN RIVER, MAN.**, has a young Horned Owl given him by a local boy who had been trying to raise it on milk and dog food. Although not yet fully developed (Oct. 14), the owl requires about $\frac{3}{4}$ pound of meat per day. People who have thought of raising young Horned Owls should read Richard Fyfe's article on the Hawk Men in this issue.

Among the clippings sent the **Blue Jay** recently by **Cecilia Hill** of **NANAIMO, B.C.**, is one from the **Birmingham Post**, June 1, 1959, re: the protest made by the Birmingham and West Midland Bird Club against damage to the countryside by roadside spraying in Staffordshire. The club protests that this is the only county council in the country that is continuing roadside spraying, and that nest sites of many birds are being laid bare at the height of the breeding season. Some time ago we had a stimulating letter on the topic of poison sprays and baits from **Alvin Goetz**, **BLUFFTON, ALTA.**, who described himself as "not a professional naturalist or such but just



Stuart Francis at Spruce Dale Farm

an ordinary farmer" aware of the dangers of poisoning wildlife and upsetting the balance of nature by the use of sprays and baits such as 1080.

One of the letters, from **Kathleen O'Drowski** of PRINCE GEORGE, B.C., was accompanied by an account of a visit paid to Spruce Dale Farm, a farm of real interest to **Blue Jay** readers because this is C. Stuart Francis' tree farm at Torch River. Kathleen visited her uncle's farm for a month in May after an absence of three years. From the moment she drove up the familiar lane over which the spruce trees clasped hands to form an arch, Kathleen began to enjoy again the delights of the farm in spring. She watched the trees come into leaf, went for evening walks in the pasture and spied a lone coyote coming out of the willows, noted the return of spring birds and especially the barn swallow (which she does not see in Prince George).

The Saskatchewan Natural History Society

Annual Meeting, October 16-17, 1959

By **Elizabeth Cruickshank**, Recording Secretary

From the moment Dr. A. J. Beddie, with his constant four-footed companion Zane, welcomed the members of the Saskatchewan Natural History Society to the lecture room of the Saskatchewan Training School until reluctant good-byes were said in the Canadian Room of the Harwood Hotel, expert planning and efficient carrying out of details was at all times evident in this year's annual meeting. The Natural History Society of Moose Jaw, the "Friendly City," outdid itself!

One hundred and two persons registered for the business and programme sessions, among them more junior members than were present at any previous annual meeting. Some members were missing—the society in the last year suffered great loss in the passing of Cliff Shaw, a former editor of the **Blue Jay**, and Allan Hudson, a former director. In their memory, a two-minute silence was observed.

The programme began with a joint lecture by W. B. Hyshka and A. J. Rankin. Mr. Hyshka gave a talk with pictures on Old Wives Lake, showing and remarking on the nesting habits of the birds which live there. The

most amazing picture was one of pelicans nesting among rose briar where the bushes had been stripped bare. Mr. Rankin's pictures were of the "Prairie Sahara." He stressed how conscious we are of water, the stabilization of which has now begun with the fulfilment of a 50-year-old dream in the building of the Outlook Dam. Pollution by oil, caustic soda and sewage of our waterways is a serious but solvable problem.

At the afternoon session, Thomas Kehoe, Curator of Archaeology and Ethnology at the provincial museum, with pictures explained how the archaeologist expects to reconstruct the history of the past in Saskatchewan. Archaeological displays arranged in the meeting room aroused keen interest and much comment.

Elizabeth Cruickshank gave some of her impressions of the A.O.U. meeting.

Resolutions presented at the meeting dealt with the following matters: a request for early development of a portion of the Moose Jaw Creek as a permanent wildlife sanctuary; request for permission to sell pictures of the habitat groups at the Museum; appreciation to the Conservation

Grants Committee of the Department of Natural Resources for subsidizing the printing of the **Blue Jay** and other S.N.H.S. publications; special thanks to Dr. Beddie for use of the lecture hall and to the Moose Jaw Society for arrangements and hospitality; recommendation of the purchase by the Department of Natural Resources of land at Warner Lake to maintain it as a natural marsh; urging of the government to set up a wetlands committee with a view to maintaining and preserving natural marsh areas in the province; increased protection for Sandhill Cranes at the north end of Last Mountain Lake, with the planting of lure crops and the compensation of farmers for crop losses incurred; request that the Department of Natural Resources set up natural grassland preserves, with the preservation of populations of the prairie dog near Val Marie as part of the plan; protection urged for the remaining Park area of the Legislative Grounds in Regina, accompanied by a protest against the recent large-scale removal of some of the oldest trees for roads and parking areas and a suggestion that replanting be under-

taken; request to the President of the United States to halt the slaughter of albatrosses on Sand Island of the Midway Group.

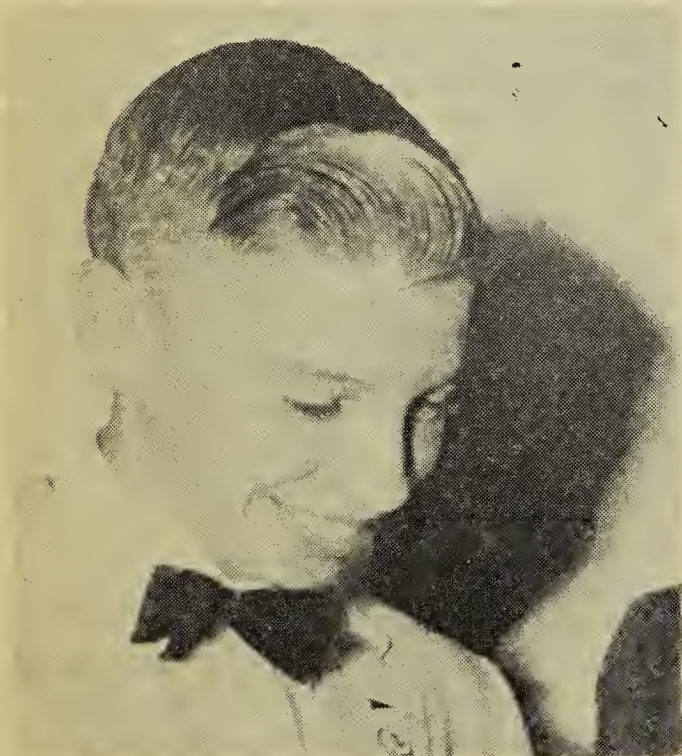
Members who showed slides included: Fred Lahrman, Joyce Dew, D. Hooper, J. Hodges, M. Street, Mrs. M. Robinson, Mrs. Cy Knight, Ethel Peart.

The first award of the Cliff Shaw Memorial Award was presented to Glen Fox for his nesting study of the Horned Lark, printed in the **Blue Jay**. The 1959 Conservation Award went to Dr. Stuart Houston, who has just published with Maurice Street **The Birds of the Saskatchewan River**.

Angus Gavin, General Manager of Ducks Unlimited, was guest speaker at the annual dinner. We are glad to be able to print his address in this issue.

Nancy Dunn and her committee cleverly fashioned decorative bird-watchers and rose-hip sprays with a beautiful floral centerpiece for the tables, bringing most complimentary comments from all present at dinner.

Old friends and new look forward to meeting again at Greenwater Lake in June and in Regina October next.



Moose Jaw Times Herald
GLEN A. FOX

The first award of the Cliff Shaw Memorial prize was made to Glen A. Fox whose study of early spring nesting of the Horned Lark in the Kindersley area was thereby recognized as a significant contribution to natural history in the **Blue Jay**.



Russell Studios
C. STUART HOUSTON

The 1959 Conservation Award was made to Dr. Stuart Houston who has published this year in collaboration with Maurice Street a comprehensive study of the **Birds of the Saskatchewan River, Carlton to Cumberland**.

The Urgency of Conservation

By Angus Gavin, Ducks Unlimited, Winnipeg

All of us who are acquainted with the history of our wildlife should realize that we are rather lucky to be living in such a land of promise at the present time. There is little doubt that here in Saskatchewan you have some of the finest hunting and fishing to be found anywhere on the North American Continent. Waterfowl populations, up to this year, have been extremely high. Sharptails, Hungarians and Ruffed Grouse have been plentiful. Even your Pheasant populations have done well. The Game Branch has been begging hunters to take more deer and moose in order to keep their populations within the limits of available browse. Fishing has been excellent, particularly in the northern parts of the province where new areas are being opened up each year.

The question is, however, how long will this mecca last. Most of us take it for granted that the abundance of wildlife we have today will continue with us tomorrow without aid or management. Nothing could be further from the truth. All we have to do is look back a few years in our history to find out what can happen to some of our wildlife species that were, at one time, so thick that they covered the plains and filled the skies during migration. The Passenger Pigeon and the Great Auk are gone. The Whooping Crane and the true Prairie Chicken are so close to extinction that it is doubtful if they will ever come back. The great herds of buffalo are reduced to those now confined to park and zoos.

People who are in the know tell us that by 1980 our human population in Canada will have increased from a present estimate of seventeen million to about thirty-five million. Farms will be larger, more people will move to the cities, automation will make a 30 to 35 hour week a reality. Everyone will be making more money and have more leisure time.

How about all this leisure and prosperity? What are we going to do with it? Yes, we can all say—"boy, at last I'll be able to hunt, fish and enjoy the outdoors all I want." But will you? Just about twice as

many people are going to have the same idea. As our population increases more and more land will come under cultivation. Many of the bluffs that raise your sharptail and pheasant flocks will disappear. Sloughs and marshes, many of which are already being drained, will no longer be available to raise the flocks of waterfowl we have been accustomed to over the past number of years. The clearing of the land, the elimination of the bluffs and wooded lots, the draining of the sloughs and potholes leaves nothing to hold the winter snows and provide an easy and leisurely run-off in the spring. Instead, our spring run-offs will come all at once causing disastrous floods. Lost top soil will flow into our rivers, streams and lakes polluting the fine fishing waters. You may say this will never happen in a civilized country such as ours. The same things were said fifty years ago in the United States and yet today they are desperately trying to buy back wetlands and other areas to provide some measure of protection for their dwindling supply of wildlife. The same thing can happen here in Canada unless we are prepared to plan and provide for our future needs now.

Just to give you an example of how fast a country can grow, let me quote from the Canada Year Book on Agriculture for the Province of Saskatchewan. In 1901 this province had roughly 600,000 acres of land under agriculture—today—50 odd years later—the total acreage under agriculture is in excess of 35 million. With an ever-increasing population can we foresee what it will be like fifty years from now. True, many of us will not be here to see what will happen but we still have an obligation to the generations that will follow us. The natural resources of our country have been given to us in trust, to use wisely, not to pollute and destroy. All of us are somewhat inclined to sit back and say this is a job for the government. They are the ones responsible for the proper management and safeguarding of our natural resources. This is true in a sense but in a democracy such as

ours, just who is the government? The people are—and it is their voice which will shape the destiny of our natural resources in this country. If we are weak in our demands for the necessary safeguarding procedures there is no question that much of the fine hunting and fishing we have now will disappear. If, on the other hand, we come forward with a strong and united voice, coupled with a sound and farsighted program, then there is no reason why we should not continue to enjoy the pleasure of outdoor living such as we have today. A program of wise conservation will in no way curtail the development of a country to its fullest capacity. In fact, the wise use of our rivers, streams, lakes and forests today will benefit development in the future. The prairie provinces of western Canada have always been subject to drought in the past and will in the future.

Any management of our waters that can be done now will do much to reduce the intensity of these drought periods in the future. Drainage of sloughs and marshes into the nearest stream or river will only add to the frequency and intensity of the drought periods, and I might add, cause serious flash flooding. This is being done now and is a serious, unwise and short-sighted policy. From this I do not mean that no drainage should be done. Some drainage is necessary to protect good agricultural land from flooding but even in this, serious thought should be given to the method of drainage used. Oftentimes it is only necessary to lower the levels of an area to protect good lands but in the majority of cases this is never thought of. The quickest way to get rid of water is to dig a ditch to the nearest river. There is little thought given to the carrying capacity of these rivers with the result that when the spring run-off takes place far more water is flowing into the rivers than they can carry resulting in disastrous floods downstream.

Even with these floods occurring practically every year, drainage still goes on and there does not seem to be much thought given to methods of correction. Yet the solution is simple, the costs reasonable and the benefits far outweigh the short term relief received from complete drainage of

an area, when the lowering of levels was all that was necessary in the first place.

Control of run-off waters in the spring and during periods of heavy precipitation is absolutely necessary if our rivers and lakes are to be suitable for fish and recreation for the generations that follow us. Silted and polluted waters are useless and only serve to remind those that follow us that we were remiss in our duties and trust.

The management of our upland game and other is an entirely different problem. Although the harvest of these species can be controlled by regulating the shooting seasons, the habitat so necessary for successful reproduction lies in the hands of the farmer and landowner. The future success and abundance of all our upland birds depends to a large extent on future farming methods. Friendly relationships between the farmer and sportsmen will do much to assure hunting in the future. Despite all that has been lost in the past and man has been blamed as the limiting factor, it can also be added that man can be the stimulating factor through wise and proper management of our present natural resources.

The way we have managed our lands and waters in the past unquestionably has had a great deal to do with shaping today's wildlife populations. How we manage our soils and water resources from this time on is sure to have an even greater impact on our future wildlife regardless of regulated seasons, bag limits and other controls of the game harvest.

We cannot hope to provide anything like the desired abundance of game for a constantly growing population unless we produce more game—And we can't produce more wildlife unless we manage our land resources so as to provide the necessary food, water and cover for wildlife.

NOTE TO MEMBERS

New members who did not get copies of the March, 1959, **Blue Jay** may write for a free copy as long as the supply lasts.

Reports from the Local Societies

There is one society from which there is no report for 1959—the Saltcoats Conservation Club was disbanded about a year ago because no one would accept the office of president when Frank Baines retired at 82 years of age. We are sorry to lose this contact with Saltcoats naturalists and our good friend Frank Baines, president of the club for many years, but we hope that a club can be formed there again. Our new president, Dr. Bob Nero, hopes that we shall have a number of new clubs this year.

Garden River—The main project of the Garden River Natural History Society this past year has been concerned with the young people of the community, now organized as a junior naturalists' group calling themselves the "Sea Gulls." These junior naturalists have been participating in bird counts and recording their observations. The club as a whole had a number of expeditions this spring attempting to locate Goshawks' nests, following the visit to the club by Richard Fyfe and his falconry group.

Moose Jaw—During the past year the Moose Jaw club has doubled its membership from 35 to 70. Meetings are now held at the Public Library the second Friday of each month. The club had a successful Christmas count, and a series of nine spring field trips, plus two joint outings with the Regina Natural History Society's bird group (one in the spring and one in the fall). The A.O.U. meetings in Regina were attended by 21 members. Their present project is a winter bird feeding programme, encouraging members and others to put up feeding trays, and distributing mimeographed material to the schools. The Moose Jaw club

played host to the annual meeting of the S.N.H.S. on October 16-17.

Prince Albert—Among the meetings and field trips arranged by the P.A. club was a popular visit from Richard Fyfe and his falcons. Main project for the year has been the setting up of a standard sample plot in the mixed wood forest north of Christopher Lake. It is proposed to make as complete as possible a biological inventory of this area, and each member of the executive is responsible for organizing the investigation of a particular subject.

Regina—In addition to regular monthly meetings, the Regina society has sponsored in the past year the Audubon Screen Tours and the Sunday "World Wandering" Shows in the Museum. It presented an aquarium to the Museum, and had martin houses made for location in Wascana Park nearby. As one of the official sponsors of the A.O.U. meeting in Regina, the club assisted with the reception in the Art Gallery following the Bird Art Show, and provided a picnic supper on the Museum lawn. Earlier in the year a reception was arranged in connection with the Bird Photography display in the MacKenzie Art Gallery.

Saskatoon — The society holds monthly meetings from September to May with popular programmes of films, speakers, etc. This spring a series of field trips was sponsored under the leadership of Bob Folker, featuring birds, plant identification and ecology, aquatic plants and invertebrates, and geology.

Yorkton—The club reports little activity this year, but one of its members, Dr. Stuart Houston, has published an important book on the birds of central Saskatchewan.

REGISTRATION

Registered at the annual meeting of the Saskatchewan Natural History Society, October 16 and 17, were 102 persons from 13 different Saskatchewan points, with one visitor from Vancouver.

Fort San: Mr. and Mrs. E. M. Callin.

Indian Head: Rose McLaughlin.

Kindersley: Glen Fox.

Lloydminster: H. C. Weaver.

Maple Creek: Mr. and Mrs. G. MacMillan.

Melville: Gary Anweiler.

Moose Jaw: Mrs. F. B. Taylor, Dr. and Mrs. D. Ewart, Patricia Douglas, Judy and Becky Ewart, Mrs. Dorothy Rhodes, Michael Rhodes, Mrs. Mary

Guthrie, Mrs. Freda Walker, Mrs. Nancy Dunn, Mrs. Freda Kennedy, Pat Kennedy, Mr. and Mrs. A. C. Ellis, John and Mary Jane Ellis, E. Watterson, W. W. Riome, Dr. A. J. Beddie, Molly Ritchie, Mr. and Mrs. J. Walker, Mrs. Annie Crofford, Mrs. Minerva Smith, Gael Irving, Mrs. O. Wilson, Mrs. Alice West, Mrs. R. Gerrie, Mr. and Mrs. A. J. Rankin, W. B. Hyshka, John Horton, Gordon Marley, F. Hill, D. Harrison, E. Schuh, O. Schuh, Grant Robertson, Rick Johnson, Mrs. Jessie Peacock, Mrs. Eva Chapman, Mrs. J. West, Nerita Steele, Winnie Johnson, Ralph Johnstone, Mrs. W. D. Nichols, Billy Nichols, Mrs. C. Knight, J. R. Gagne, Mrs. F. V. Humphreys, Mrs. A. Robertson, Mrs C. Gillett, C. C. West.

Naicam: W. Yanchinski.

Piapot: Mr. and Mrs. S. A. Mann, Helen Mann.

Regina: F. Brazier, Mrs. Elizabeth Cruickshank, Margaret Belcher, Connie Pratt, Sylvia Harrison, Mr. and Mrs. B. Knox, Dr. and Mrs. G. F. Ledingham, F. Bard, D. Gilroy, E. L. Fox, Reg Fox, Mr and Mrs. J. Hodges, Marguerite Robertson, Joyce Dew, F. W. Lahrman.

Saskatoon: J. Shadick, J. H. MacLennan, T. Phenix, F. Roy, Dr. and Mrs. J. Gerrard, John, Jonathan, Peter and Christopher Gerrard.

Somme: D. Hooper, A. A. Black.

Spirit Lake: W. Anaka, Mrs. J. A. Gunn.

Vancouver: R. C. Gaschen.

Yorkton: Dr. and Mrs. S. Houston.

FINANCIAL STATEMENT 1959

SASKATCHEWAN NATURAL HISTORY SOCIETY

EXPENSES:

Printing (4 issues Blue Jay)	\$3,112.76
Mammals	1,079.18
Xmas Cards	465.26
Honoraria	373.00
Miscellaneous	226.12
Postage	63.12
Typing	44.00
Bank Charges	58.34
Loss on Bonds	38.25
	\$5,460.03

INCOME:

Subscriptions	\$2,940.64
Mammals	483.00
Xmas Cards	577.39
Advertising	75.00
Reprints	39.86
Film Shows at Museum	84.00
Annual Meeting	77.30
Donations and Sales of Back Issues	115.00
Birds of River	24.00
Interest	22.39
	\$4,438.58

EXCESS OF EXPENSES OVER INCOME

	\$1,021.45
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COMPARATIVE STATEMENT OF NET WORTH

October 1, 1959

Current Account	\$ 350.71
Savings Account	660.26
Bonds	258.75
	\$1,269.72

October 1, 1958

Current Account	\$1,356.30
Savings Account	637.87
Bonds	297.00
	\$2,291.17

DECREASE IN NET WORTH

	\$1,021.45
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THE SASKATCHEWAN NATURAL HISTORY SOCIETY

Officers, October, 1959, to October, 1960

Honorary President	Dr. W. P. THOMPSON, Saskatoon
Past President	MANLEY CALLIN, Fort San
President	ROBERT W. NERO, Sask. Mus. of Nat. Hist.
First Vice-President	ELWIN BAINES, Tisdale
Second Vice-President	RONALD BREMNER, 402 Canada Building, Saskatoon
Business Manager	FRANK ROY, 120 Maple Street, Saskatoon
Treasurer	CONSTANCE PRATT, 3136 Rae St., Regina
Editor	GEORGE F. LEDINGHAM, 2335 Athol St., Regina
Secretary	MARGARET BELCHER, Regina Col- lege, Regina

DIRECTORS:

Three-Year Term: Keith Baker, Weyburn; Keith Best, Swift Current; William Brownlee, Rose Valley; Robert Folker, Saskatoon; Thomas Harper, Regina.

Two-Year Term: Joyce Dew, Regina; Mrs. Betty Gerrard, Saskatoon; S. A. Mann, Skull Creek; Mrs. Marion Nixon, Wauchope; Maurice Street, Nipawin.

One-Year Term: A. Capusten, Prince Albert; C. S. Houston, Yorkton; D. S. Rawson, Saskatoon; E. E. Symons, Rocanville; J. Walker, Moose Jaw.

PRESIDENTS OF LOCAL BRANCHES:

Bruce Knox, Regina; Phil Pawluck, Yorkton; M. Welsh, Prince Albert; John Shadick, Saskatoon; Carl Ellis, Moose Jaw; F. W. Batty, Garden River.

CHAIRMEN OF COMMITTEES:

Birds of Prey: R. Bremner; Calendar: E. Fox; Conservation: F. G. Bard; Constitution: F. Brazier; Membership: Sylvia Harrison; Publications: C. S. Houston; Publicity: D. Gilroy.

NOTICE TO MEMBERS

Because the actual printing of the **Blue Jay** magazine (exclusive of other expenses of publication) now costs more than our memberships bring in as revenue, the Annual Meeting of the Society, October 17, 1959, decided that the membership fee must be raised to \$2.00. At the same time, the society is anxious to encourage all young people interested in nature to become members, and the \$1.00 memberships has therefore been retained for all junior members and for schools.

MEMBERSHIPS

All persons interested in any aspect of nature are invited to join the Saskatchewan Natural History Society. Membership dues per calendar year are: Regular, \$2.00; Junior Memberships (including schools), \$1.00. The **Blue Jay** is sent without charge to all members not in arrears for dues. Send your membership to the treasurer, Constance Pratt, 3136 Rae Street, Regina, Sask.

REPRINTS

Reprints from articles printed in the **Blue Jay** should be ordered by the author directly from Midwest Litho, Saskatoon, Sask.

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Early Morning Birding with the A.O.U.

Photo by F. W. Kent

SEND ALL SUBSCRIPTIONS, RENEWALS AND ACCOUNTS TO
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SEND MATERIAL FOR PUBLICATION IN THE MARCH ISSUE
BY JANUARY 15, 1960, TO

G. F. LEDINGHAM, 2335 Athol Street, Regina

A55764